

February 1955

house + home

For complete contents (see p. 111)

News Report on the 1955 National Assn. of Home Builders' Chicago convention (p. 37)

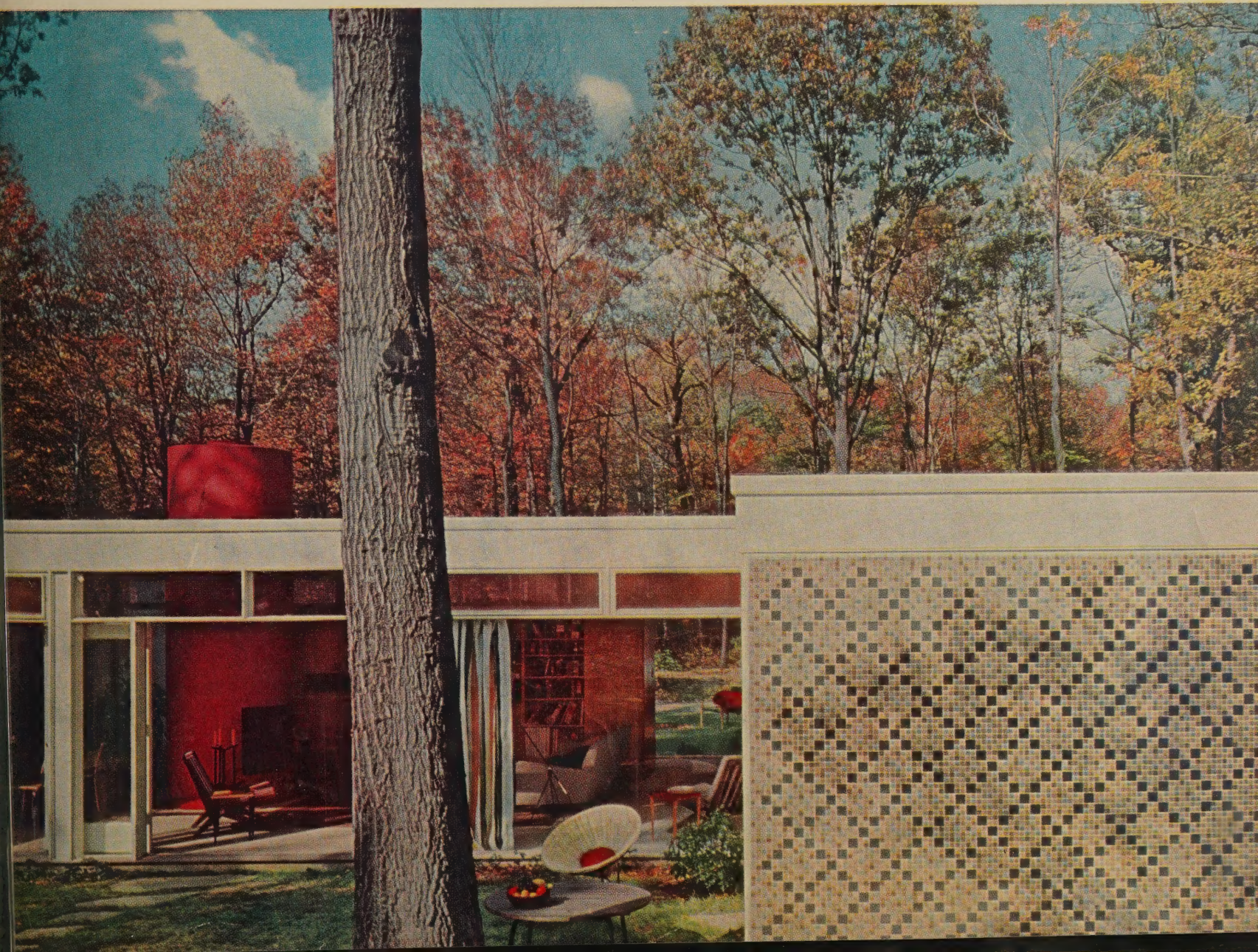
Housing finance How two young California builders sold 1,500 houses without FHA or VA and how they tripled their profits per house (p. 120)

Architect and builders What is a fair design fee per house? What services should that buy? What returns can the builder expect? (p. 134)

Split-level boom A good way to build a bigger house, but a very bad way to build a small one. How to make them look better and how to make them work better (p. 144)

Lumber dealer Indiana's largest meets prefab competition by selling his architect and his architect's designs as part of his package (p. 160)

Home decoration Does modern have to mean plain? More and more architects answer no (p. 112 and below)



edged, in the same breath, that his organization was still opposed to public housing, however. (NAHB's policy declaration called further public housing "unnecessary" and noted that incomes have risen so much in the last decade that more and more projects are facing vacancies.) Smith expressed hope that FHA Secs. 220 and 221 (if amended as NAHB asks) will "make unnecessary any expansion" of public housing.

The race for NAHB president was actually a tricorned affair. Nate Manilow, co-developer of Chicago's Park Forest, withdrew following a serious abdominal operation. As first vice president, he was the leading candidate, although under fire in some NAHB quarters for 608 involvements. Many Manilow supporters threw their backing to Burkhard, who was last year's second vice president. Smith, a later starter, campaigned on the basis of ending NAHB's "kingmaker" system, under which top officers generally (but not always) move up through a series of national jobs. Third candidate, Joseph Haverstick of Dayton, Ohio, general convention chairman, switched his support to Burkhard at the last minute. Haverstick emerged as first vice president, defeating Prefabber Hamilton Crawford.

So close was the race between Smith and Burkhard that the nominating committee headed by Ex-President Joe Merriam of Chicago presented both names to the directors. Resulting vote: Smith, 164; Burkhard, 155. The secretaryship required a runoff between Carl Mitnick (elected), John D. Harrison of Detroit and E. J. Burke of San Antonio.

Curbs on public housing will stay, Wolcott predicts

Top-drawer speakers at convention sessions ranged over the gamut of housing problems. Some of the most noteworthy pronouncements:

► HHF Administrator **Albert M. Cole**: "We are in danger of building into our suburbs and new growth the same seeds of blight and obsolescence

that afflict our older areas. . . . Slums and blight are the homebuilders' worst competition. You can't do business if you have to pay both your own expenses and those of your competitor as well. . . . Blight has not followed the Negro; the Negro has been forced to follow blight. . . . We want to see both the need and the pressure for public housing reduced to the minimum."

► Rep. **Jesse Wolcott** (R, Mich.) minority leader of the House banking committee (in an exclusive interview with *HOUSE & HOME*): "Congress probably will not change the displacee formula for public housing this year. If you have vacancies in public housing in the same city these should be

considered the same as other low-rent housing available to displacees. . . ." Wolcott predicted that if housing officials try to jam public housing allocations through on any basis which "ignores" this legal requirement (as they have begun to do), Congress may retaliate by cutting off appropriations next year.

► Sen. **John J. Sparkman** (D, Ala.), No. 2 man on the Senate banking committee: "I do not expect that during this year the banking committee will check into our housing operations along quite the same lines or with the same aim in mind [as Sen. Homer Capehart's FHA scandal probe]."

NAHB's new president: a builder of small homes for small towns on a huge scale

"You've got to learn the kind of a guy I am. I'm not a very spectacular kind of guy and I don't go off half-cocked if I can help it."

Such plain talk is typical of Earl William Smith, 48, a plain man who for years was accused of being half-cocked by bankers, realtors and neighbors who thought his \$6,700 flat-top dwellings were God's gift to no one. They were wrong; the houses turned out to be Smith's gift to the working man. Last year Smith started 2,816 of them—the lowest-priced now up to \$7,000—in 30 communities in northern California to take title as the fourth largest builder in the nation. But because everything about his business except volume is small (his staff and his houses, for example) he is not thought of as one of the moguls of building. As one of his two partner-brothers summed up the operation a few months ago: "We like to build little houses for little people in little towns."

Carpentry, portraits, hi-fi. Smith was and is a carpenter and he quit school when he was 14. But he did not quit learning. "He's a remarkably well-educated man," said a close associate recently. "He reads philosophy, reads history, he paints landscapes and portraits and he's a hi-fi fan. He is a really



PIPE-PUFFING PRESIDENT Smith came to first press conference flanked by Executive Director John Dickerman. On trends, Smith commented: "More and more people are coming to the conclusion they get more house when you get into contemporary design."

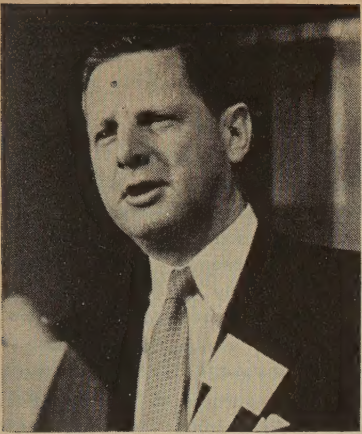
colorful and fabulous guy."

Smith now lives in Berkeley, Calif. in what a visitor has described as "one of those frightful Spanish colonials in vogue in California about 20 years ago". He helped build it with his own hands, and he likes it, but has said that if he moved he would move to a flat-top (he designs all the homes his organization builds). He is married to Adelia Maynard of Oakland (a geranium and Mexican glassware fan), has three children (baseball and birds' nest fans) and two cars—a Cadillac and a Buick station wagon. Asked at the convention why he did not have a private airplane, Smith took his pipe out of his mouth, cracked unsmilingly: "I've got news for you; I'm never going to have one."

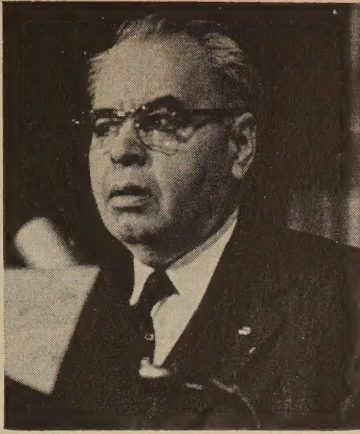
Stimulation of research has been one of his big contributions to NAHB. As Len Haeger, Research Institute director, has put it: "Smith was responsible for carrying out the whole concept of the idea that we would have a Research Institute." His interest in the nuts-and-bolts of construction—always toward keeping construction costs at bottom level—has earned him his reputation as a dynamic builder of houses for low-income families.



OUTGOING PRESIDENT Hughes, a 'round-the-clock worker, went over the final draft of his convention address with Joe McGrath, NAHB legislative director, after midnight in the Hilton Hotel lobby. In it, he charged FHA probes have "left a scar upon the industry," and made officials, "jumpy, afraid to make decisions, afraid to issue proper regulations."



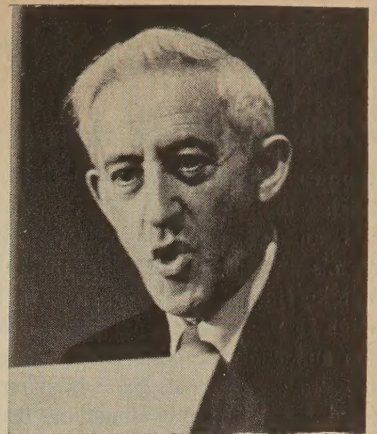
HHF ADMINISTRATOR COLE
A plea for urban renewal



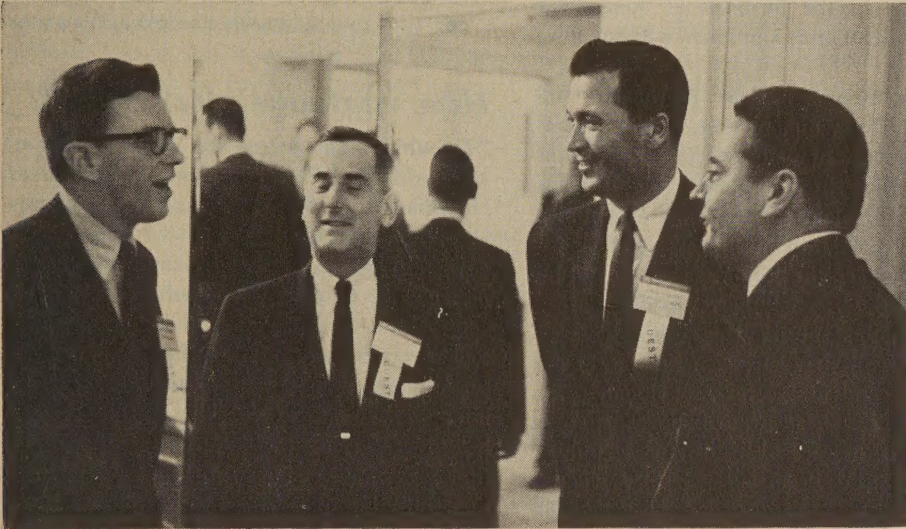
REP. JESSE WOLCOTT
No money for public housing?



SEN. JOHN J. SPARKMAN
A new kind of FHA probe?



DR. ABEL WOLMAN
Unsubsidized community facilities?



ARCHITECT HUDDLE: In HOUSE & HOME's hospitality suite, Architects Hugh Stubbins, Neil Connor (FHA director of architectural standards), Ed Fickett and Quincy Jones shared a laugh. Fickett told a convention session that "an all-inclusive contract between architect and builder" was the best possible relationship. Asked what he thought a fair fee, Fickett said his policy was to charge "a fixed fee plus a royalty on a sliding scale."

H & H staff photos



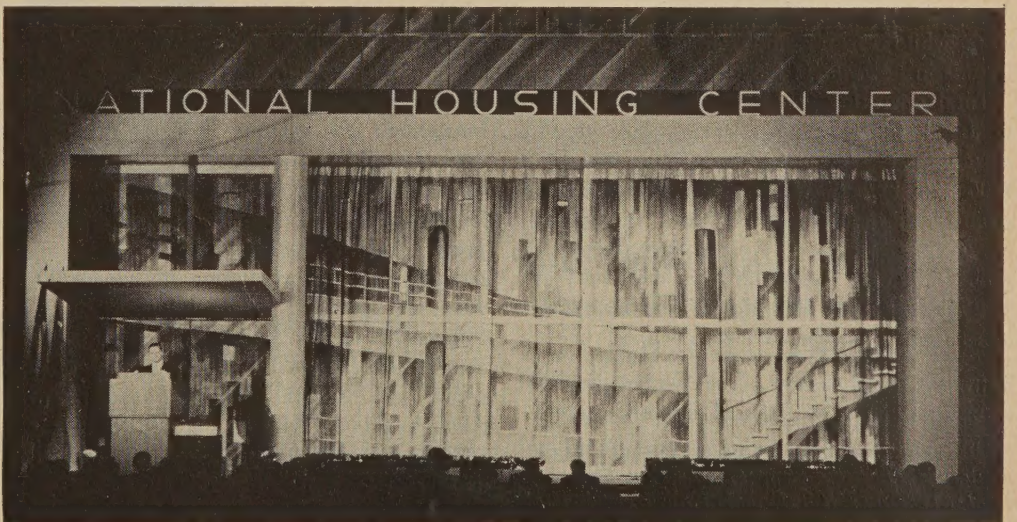
EX-PRESIDENTS Tom Coogan (l) and Bill Atkinson paused for a corridor chat. Coogan successfully urged NAHB board to pass a resolution urging all closing costs be paid in cash. "No-no down payments," he argued, "are making it so easy to merchandise houses that it's attracting speculative investors and threatening overbuilding. We don't want to face the same thing the auto industry went through last year."



POLICY CHAIRMAN Leonard Frank of Hicksville, L.I. faced diplomat's task of resolving conflicting viewpoints on NAHB official views. Confering with him: D. A. Belfoy of Tacoma, Wash.



MORTGAGE PANEL LED BY DICK HUGHES HEARD PREDICTIONS OF MONEY-TIGHTENING



GENERAL SESSIONS WERE HELD BEFORE BACKDROP DEPICTING NATIONAL HOUSING CENTER

(continued on next page)

CONVENTION SIDELIGHTS

NAHB to refute charge

The problem of community facilities was even tougher than it looked. NAHB was disturbed over an article in the American Municipal Assn.'s magazine declaring that the home-building industry "is launching a new campaign to upset municipal subdivision regulation and control." Commented outgoing Second Vice President Paul Burkhard in the opening session: "It is nothing less than an attack." Burkhard called for effort from all members to refute the claim and stem incipient antagonism between city agents and builders. Added new President Earl Smith: "We ask everybody to help us and we'll help them. There's been a misconception. . . ."

Sick list

Two of NAHB's best-known men were struck down before or during the convention. Ex-president Emanuel Spiegel collapsed while toasting a Chicago home builders' dinner just before the convention opened and was still in a hospital when it ended. First Vice President Nathan Manilow was absent recuperating from recent surgery.

Research Village

By mid-April, every man and woman in the country should hear about US Gypsum's Research Village. It will be the most widely publicized group of houses ever built. The six houses in Barrington, Ill. have been a project approved by the NAHB Research Institute for some two years. Now finished, decorated and open to builders, the houses were one of the talking points of the con-

vention. "They're tops in new ideas," said Builder Andy Place, who was moderator of a session on the project. "Many of the ideas you'll see here will be in common use in two or three years."

Designed by six different architects, each of whom worked closely with a builder adviser, the houses also use many materials proven in industrial construction.

'Get out & legislate

"You may say to me, 'I am in the business of building houses, I am not in the business of sponsoring legislation.' I suspect you will have to get in the business of sponsoring legislation, because this problem will not solve itself."

In the convention's most provocative address, Dr. Abel Wolman (cut, p. 39), venerable professor of engineering at Johns Hopkins University, laid down his law for solving the problem of providing community facilities in the nation's fast-growing suburbs: a device to spread the costs "as they should be spread" through pooling resources. Most workable method at hand, he thought, was large metropolitan districts with power to raise money and assess for repayment.

"I'm one of those who believes that a subdivider is not a substitute for a public agency," he said in discussion. "He should not be expected to do those things that society is unable to do through a public agency."

Wolman called state subsidies for community facilities like schools and sewer expansion generally unnecessary and federal subsidies "completely unnecessary" in many instances.

Onward and upward

Membership and money were up for NAHB in 1954. The 33,000 mark in membership—goal for the past year—was reached, a 13.4% increase in 12 months. Spike Club membership reached 600. Income from all sources touched \$902,601, nearly \$120,000 over what was anticipated. The breakdown: membership dues—\$575,410; convention proceeds—\$229,829; "Correlator"—\$79,315. Expenses were \$751,890, leaving a surplus of \$150,711. For '55, expected gross income was pegged at \$915,054.

The convention topped its own records, too. Attendance reached nearly 23,500. There were 544 exhibit spaces for 347 exhibitors, staffed by 3,000 people. Panels had 270 participants.

New mortgage pinch ahead?

"The thing that scares the daylight out of us," said Vice President George Conklin of Guardian Life, "is the construction figures for December."

Conklin recited the figures for the economic panel—starts up 90% over the year before, commercial contract awards up 100%—and took a crack at estimating the money supply for '55. His view: 1.3 million starts could be financed with \$25-26 billion of mortgages; but if builders push it to 1.5 million starts or over they may well end up in a tight money situation, building at a rate they cannot sustain. His general prediction for '55: "A rising trend in the economy; no boom—the economic forces are not there. A slight tightening in the markets and a slight rise in the interest rate."

Dr. Edwin George of Dun & Bradstreet was worried by rising vacancies, growing mortgage debt.

Houses in Air-conditioned Village cooled for average \$21 a month

The 22 guinea pig houses in NAHB's \$400,000 Air-conditioned Village in Austin, Texas have paid off with a wealth of practical information. Findings revealed at the NAHB's convention show chiefly that the best designed houses have rock-bottom operating costs while several dud houses are object lessons in how *not* to install air conditioning.

Total operating cost for cooling the 1,146 to 1,468 sq. ft. houses during last year's scorching summer averaged a respectable \$105 per house although the thermometer zoomed above 100° on 31 days. Over the five-months cooling season the cost amounted to \$21 a month (based on local electricity at 1.6¢ per kwh).^{*} In most US cities, such houses could be cooled even cheaper.

Winners and losers. The five best houses actually came in with total operating costs

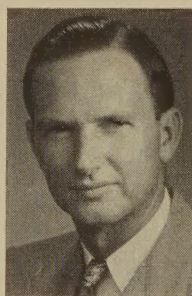
^{*} Although the cost study did not actually begin until June 15, overall summer bills were obtained by Texas Power & Light Co., whose engineers closely estimated early operation according to Weather Bureau records.

of less than \$80 for the season. Half of the 22 houses had total costs under \$100. Almost uniformly these houses have heavy wall and roof insulation, shading for windows and good orientation.

High cost houses were notable for inadequate insulation, few shading devices and a poor orientation. Said Austin Architect-Builder Ned Cole, project manager for the research: "Poor orientation is suicide." He disclosed that an accidental shift of only 7° from south to west in one house nullified the shading effect of a 36" south overhang. The result was that the increased sun pouring through a large window boosted the over-all heat load by 4,200 Btus and lifted the operating cost by more than 15%.

Cole said it is clear that 2-ton units will adequately cool well-designed houses up to

Koen Photo Service



COLE

1,350 sq. ft. despite 100°-plus temperatures. "Under actual conditions," he said, "the units maintained an average of 77° indoors at an average outdoor high of 103°." This is a 26° drop whereas at the start some skeptics said that even 20° cooler would never be achieved.

Sound problem. Noisy units were perhaps the biggest problem encountered by Engineer C. W. Nessell, who directed field research. He pointed out that noise was as much due to several poor installations, as to chattering units. Only eight of the 22 families already complained of noise. Other findings:

► Poorly installed ductwork was the major cause of inefficiency, especially cool air ducts running through hot attics without adequate insulation.

► Kitchen exhaust fans were not as effective as they should be in removing cooking heat because women forget to turn them on. Needed: automatic controls.

► Cooling towers for conserving water were extremely efficient; water costs were reduced to as little as \$2 a house for the whole summer.

FHA black list row flares

Housing agency threatens to blackball 4,000 Sec. 608 sponsors who spurned controversial questionnaire on profits last summer. Industry wangles a delay

*For it really doesn't matter whom you place upon the list,
For they'll none of them be missed, they'll none of them be missed.*

—Ko-Ko in "The Mikado"

A behind-the-scenes storm over FHA's controversial black list of Sec. 608 builders blew up in Washington last month.

Word leaked out that FHA was getting ready to pounce on the 4,000 Sec. 608 sponsors who did not answer its celebrated summer questionnaire on profits—windfall and otherwise. FHA action would probably have amounted to adding the 4,000 to the 308 already black listed (H&H, Nov. '54, News). Prompt intervention by industry leaders only succeeded in persuading FHA to hold up action. Spokesmen argued that, assuming an average of three sponsors per 608 project, such a move could shut 12,000 builders off from the FHA program.

Clearance tangle. The new black list threat arose, ironically enough, while FHA was attempting to persuade the Justice Dept. to let some of the 308 stigmatized builders and lenders off the list. FHA, almost as unhappy as builders about the long hassel, would like to remove the names of builders it can absolve of any criminal acts involving 608 projects even though they may have mortgaged out. In fact, FHA was ready to announce that 25 such builders would be restored to its good graces when Justice officials blocked the move. Reason: they wanted more time to examine the cases.

While FHA General Counsel Frank Meistrell shuttled back and forth between his office and the Justice Dept., the black listing dispute erupted again in Denver, where Garrett-Bromfield & Co. was battling in court to force FHA to process its mortgage applications. The big real estate firm had sued in federal district court last fall for an injunction canceling an FHA order barring it from applying for FHA insurance on new projects. Confronted with the suit, FHA withdrew the ban, but on Dec. 14 reinstated it. Attorneys for Garrett-Bromfield immediately charged "arbitrary, malicious and contemptuous disregard of the FHA's promises and representations to the Court."

Nine days later, after an all-day huddle with US and FHA attorneys, came another "truce" restoring the firm's processing rights. Said Company Attorney Erskine Meyer: "We have what is in effect an injunction against FHA—by stipulation." While it was in force, Garrett-Bromfield hoped to settle the row with FHA authorities in Washington.

New orders due. The matter of outstanding importance to the homebuilding industry was whether FHA legal lights would demand positive action against the presently unbranded 608 builders it wants to check. Top FHA men made one thing clear: they will send new instructions to field offices on processing applications from 608 participants not in the clear—which as of the last count still meant all of them. Presumably, this would involve either an expanded black list or case-by-case interrogation as new applications are received.

Industry spokesmen fear this may tie up

Ike asks 'firm' 35,000-unit-a-year program but hints end of public housing in 1958

Did President Eisenhower mean no more public housing would be needed after 1958 or didn't he?

The chief executive's state-of-the-union message last month to Congress touched on the question, but in language equivocal enough so that each side on the public housing issue thought the President had spoken in its behalf. Said Eisenhower:

"As part of our efforts to provide decent, safe and sanitary housing for low-income families, we must carry forward the housing program authorized during the 83d Congress. We must also authorize contracts for a firm program of 35,000 additional public housing units in each of the next two fiscal years. This program will meet the most pressing obligations of the federal government into the 1958 fiscal year for planning and building public housing. By that time the private building industry, aided by the Housing Act of 1954, will have had the opportunity to assume its full role in providing adequate housing for low-income families."

Differing interpretations. Both pro- and antipublic housers found comfort in Ike's words. Public housers professed to be pleased that the President called for "firm" program of 35,000 units a year (the same program he espoused last year). They felt Eisenhower was asking Congress obliquely to soften or scrap amendments in the present public housing law limiting it to displacees

FHA's program in a never-ending legal snarl. If FHA is determined to bar 608 builders of doubtful innocence from its program, they contend the agency should go about it differently. Instead of requiring proof of their innocence, they argue FHA should take the more charitable (and more American) method of letting them continue to do business with FHA until they are found guilty of something.

At midmonth, building men were somewhat optimistic over the outcome. They felt they had made some dent in the FHA case for further punishment by their arguments that the questionnaire had been of doubtful legality—that FHA was skating on thin ice when it told 608 builders to reply under oath but that their answers would be subject to audit. Why not, they asked, send out new questionnaires more reasonably worded? Or even better, let FHA ask new applicants if they had ever had any 608 dealings and if so, obtain the particulars.

FHA had not indicated which way it would jump. But officials were still miffed that their request for information had been so widely snubbed. They were still insisting that unless some kind of a reply was received they would have to take disciplinary steps.

from slum clearance and other public improvements. They contended that in hinting a two-year program was enough, the President was putting private industry on notice that if it could not then take over, there would be more public housing than ever.

Industry pundits read no such meaning into the Presidential remarks. All the President said, they argued, was that after the new aids to private housing take hold, there would be no more need for public housing. They also scoffed at the inference the message criticized the crippling amendments on the present law.

The President's support for 35,000 public housing units a year was expected. Less expected was his state-of-the-union comment that the Housing Act of 1954 had "brought impressive progress in an area fundamental to our economic strength and closed loopholes in the old laws permitting dishonest manipulations."

Four windfallers offer to return \$1 million profit

It looked like a long cold winter ahead for the 608ers after all.

A matter of weeks after Congress changed hands and the Democrats said they would continue to investigate housing but would probably not harp on dead pigeons like 608, FHA General Counsel Frank Meistrell announced that the agency had persuaded four big build-

continued on p. 43

no stretching of points...

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ers to pay back over \$1 million in windfalls.

"We have in mind, and in my opinion I think we have very good grounds, for recovering a substantial amount of this money [windfalls] for the government," Meistrell told the House appropriations committee. "Time, of course, is an important factor. There has been a great deal of publicity given to this whole problem, and I think if we move rapidly and effectively we will be able to recover a substantial sum of money."

He also issued what seemed the most hard-headed dictum builders and FHA employees had yet received: "We have evidence of irregularities that may ultimately constitute fraud in a legal sense. We have evidence of corruption on the part of FHA employees."

"There are many problems of that nature which are strictly legal in their concepts which we hope to investigate and prepare . . . so that

if we are not successful in effecting settlements, we will proceed to litigation."

Meantime, a cataloging of legal progress to date against FHA members and builders showed no sign of indictments (much less convictions) stemming directly from the Congressional investigation. Justice Dept. reports listed fairly extensive action against Title I repair violations during the past two years but almost half of the indictments had occurred before May 1, 1954. Only nine of the other 19 indictments were even dated as having been effected after the probe started and none involved matters discussed by the committee.

In assessing the following chart it should be remembered that a violation of Sec. 1010 of the Criminal Code (which prohibits false loan documents in applications for FHA insurance) is charged in almost all cases. The chart has been adjusted, however, to show in what par-

ticular phase of housing those indicted were operating.

BOX SCORE: FHA INVESTIGATION

Title I repair loans	
Persons indicted	206
Found guilty	78
Sec. 203	
Indicted	2
Found guilty	2
Sec. 608	
Indicted	4
Acquitted*	2
FHA employees charged	
Indicted	4
Found guilty	1
Slum clearance	
Indicted	4
Miscellaneous	
Indicted	5
Found guilty	1

Source: Justice Dept. *—Long and Carpenter, Puerto Rico.

SIDELIGHTS

First voluntary credit loan

The first exercise of provisions of the voluntary home mortgage credit program—the new Housing Act's answer to buyers and builders in remote areas who cannot obtain FHA or VA mortgages—took place last month in little (pop. 271) Timberville, Va. Assistance under the program is limited to persons living in areas designated by the VHMCP regional committees except in the case of minority groups, who are eligible regardless of where they live. A person wishing to finance a home must show that he has sought a loan from at least two lenders and been turned down; his application is then circulated among lenders by VHMCP.

Builder H. E. Mason of Harrisonburg, Va. named nine lending institutions from which he had been trying unsuccessfully for a year to get financing better than ten years, 40% down. There was a large demand, he said, for housing in the \$8,000-10,000 bracket from persons working in nearby factories, but other local loans were more profitable. Mason's application was referred, alphabetically, to Frederick W. Berens Inc. in Washington and the firm arranged loans on two of Mason's houses with Guardian Life Insurance Co.

Prefabs expanding market

Prefabbers are continuing to grab a bigger and bigger slice of the new housing market.

The Prefabricated Home Manufacturers Institute reported that the industry shipped some 71,000 houses during the first 11 months of 1954. Sales of PHMI members climbed 31% over 1953 levels, compared to an 8% gain in housing starts.

Realtors v. lawyers

A district court decision climaxing a four-year-old test case in Denver cut down the number of real estate documents that realtors there may process. Under the decision (which may be appealed to the state supreme court) the brokers are forbidden to

prepare the following: deeds conveying real estate, deeds of trust encumbering real estate, mortgages encumbering real estate, promissory notes secured by trust deeds or mortgages, releases of trust deeds and mortgages, real estate leases, notices of tenancy termination and demands to pay rent or vacate. Title insurance firms were ordered to stop preparing deeds conveying real estate. President Sam G. Russell of the Denver Board of Realtors said the order will mean a minimum of \$20 "and in many instances considerably more" added expense to the principals in the sale of an average mortgaged house.

New high in restrictive zoning

Orinda, Calif., an outer suburb of San Francisco that is fighting to keep the rural atmosphere which caused most people to move there, is adopting the most highly restrictive zoning code in California—and perhaps in the nation. The action has earmarks of being the start of a new trend, reflecting mounting public resentment against the garish ugliness of many a suburban crossroads commercial center. The ordinance, given first passage by the Contra Costa County supervisors in December, would apply to all future shopping centers in one of California's fastest growing suburban counties. It may establish a precedent for the state.

The ordinance bars from "special business districts" (i.e. planned shopping centers) tap rooms, mortuaries, large outdoor signs, amusement centers and theaters. Outdoor advertising is limited to identification of premises. Parking areas must be king size—1½ sq. ft. of parking per ft. of building space. The row arose after the East Bay Municipal Utility District sold 25 acres of vacant lot inside a mushrooming shopping district to Pacific Intermountain Express, which hoped to put up a \$1 million office building, gambled on getting the acreage rezoned. Along with the mortuaries and tap rooms, it lost out.

Pru borrows to buy mortgages

Mounting mortgage commitments and optimistic predictions for 1955 housebuilding led Prudential Insurance Co. into a \$350 million mortgage warehousing plan last month, involving 150 commercial banks. Warehousing is not a new technique in the mortgage industry. Three items made this plan a first:

1. It is on a national basis.
2. The term is longer than the usual 90-120 days.
3. The amount involved is the largest ever for insurance company warehousing.

Prudential gives an unconditional commitment to commercial bank participants to repurchase the warehoused loans, even defaulted ones, between next January and June 30, 1956. In addition, explained a Prudential spokesman, "the mortgage loans [FHA and VA only] are closed by Prudential, with Prudential funds, on Prudential paper, and with Prudential's name..." Why was Pru launching this program? "To insure an even flow of Prudential funds into mortgage investments. . . . We have bought heavily and we have undertaken this arrangement to be able to participate in what promises to be a big building year."

Pru's plan strongly resembled the experimental warehousing arrangements described in the November '54 HOUSE & HOME (p. 45), and used by Metropolitan Life and a half dozen of its correspondents since early '54. But unlike the Met, Prudential operates largely through branch offices, not mortgage correspondents. Hence the spread between the commercial bank interest rate charged Prudential and the FHA-VA 4½% rate is profit for Prudential, not correspondents. In Prudential's case, the spread was reported close to 1%. This alone could net Prudential a tidy \$3 million on its borrowed money.

Was Pru actually overcommitted? A spokesman said "not quite." Other mortgage experts close to the picture conjectured that Pru wanted to buy home loans now in anticipation of a dearth of good mortgages later (if, for example, '55 activity fell below expectations) or of a drop in interest rates in '56. Prudential denied this unequivocally.

continued on p. 45

wanted



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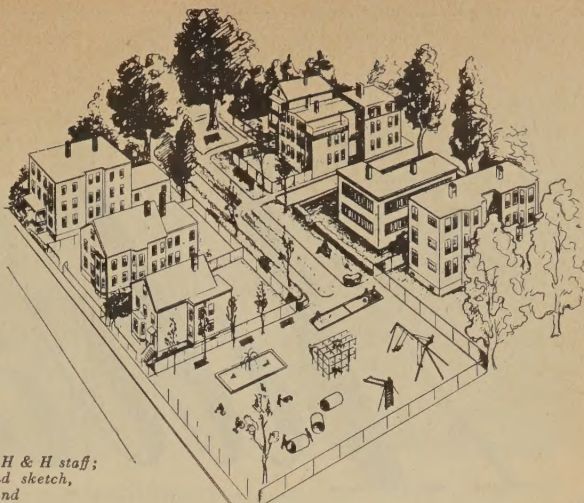
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2601 Westwood

Toledo, Ohio



URBAN RENEWAL BLOCK in Ward I is mixture of aging homes, stores, four-story flats and vacant lots bounded by broken fences and littered with debris. House at right has no street frontage.



Photos: H & H staff;
maps and sketch,
Fred Lund

RENEWAL PLAN would remove interior house, substitute L-shaped park over adjacent vacant lots. Most remaining houses need fix-up. State-aided old age housing would go on tax title lot (second from right).

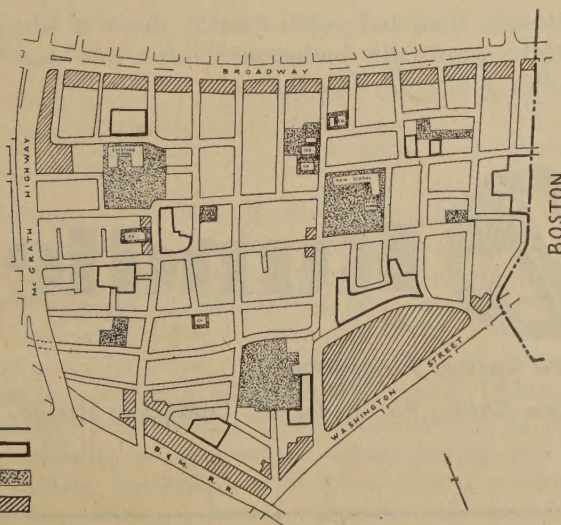
How urban renewal may save a stagnant city



KEY
 DETERIORATED STRUCTURES
 VACANT LOTS
 PUBLIC (SEMI-PUBLIC LAND)
 BUSINESS ZONE
 BUSINESS & INDUSTRIAL USE

SOMERVILLE PLANNING BOARD 1954

WARD I RENEWAL AREA is neighborhood of 15,000 persons. Map above shows cluttered mixture of stores, deteriorated structures as it is now. Map below indicates city plans for renewal. The block pictured at the top of the page is near upper right on the maps, top left of corner of Perkins and Mt. Vernon Sts.



KEY
 NEW PUBLIC & PRIVATE HOUSING
 PUBLIC (SEMI-PUBLIC LAND)
 COMMERCIAL DISTRICTS

SOMERVILLE PLANNING BOARD 1954

Somerville, Mass. plans reveal both promise and problems in new housing law

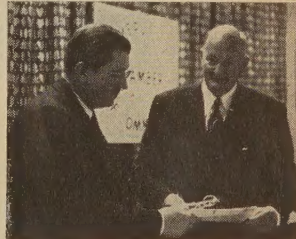
Around Boston, it was cause for polite astonishment last month that the suburb of Somerville (pop. 102,254) had become the second city in the nation to take advantage of the biggest new idea in the 1954 Housing Act: urban renewal.

Somerville is held locally in various regard—mostly unflattering. Brookline socialites are apt to refer to it as a slum town. Some teachers of political science have held it up as a historic example of civic misgovernment. Somerville's current political leaders agree it is a city of industry (but not enough) and "lower middle-class families."

Somerville indeed has an impressive list of drawbacks:

► Its families (many of them tenants in two-, three- and four-family frame houses) are packed into the city's 4.1 sq. mi. at a density of 26,000 per sq. mi. This makes Somerville one of the most densely populated municipalities of its size in the nation. Yet because many of its lots were laid out big enough to permit space between houses, the city does not look as heavily peopled as it is.

► Since 1925, new home building has been nil; 1925 was the year the city 1) about ran out of vacant land and 2) passed its first zoning ordinance, thus taking its first firm step against land misuse after land use was solidly entrenched.



DONOVAN & FOLLIN

A workable antiblight plan

Fix-up or deteriorate. Today, Somerville wears a tired look. Its best young men and women, growing up and making their own homes, are trending toward the outer suburbs. Somerville's new families tend to come from the worst of Boston's slums (where living conditions are far worse). But the switch does not make Somerville leaders happy. Says Mayor William J. Donovan (a fuel and furniture moving merchant who is probably the antithesis of the political gang that ran the city for so many years): "Unless we build a modern environment for our people they will leave us, neighborhoods will deteriorate and slums will appear. We can slowly deteriorate or we can become an oasis of comfortable living. The objectives are simple, the attainment complex."

The complexity of attainment, which is the urban renewal process, is indeed the reason why so few US cities have yet matched Somerville's progress in laying plans to stem the spread of blight. Somerville was the second city to win HHFA approval of a "work-

(continued on p. 47)

Advanced Design!

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You know that most women, and men, too, judge the bathroom fixtures in your homes first, by how they *look*. You can be sure your prospective home buyers will appreciate the superb styling of Universal-Rundle fixtures.

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Plants in Camden, New Jersey; Milwaukee, Wisconsin; New Castle, Pa.; Redlands, California; Hondo, Texas



BRICK BOTTOM REDEVELOPMENT project, adjacent to renewal area, calls for demolition of aged slum housing like the three-story frame structure in the center of photo. Litigation has held up start of work.



MARKED FOR DEMOLITION in renewal block shown in "before" and "after" photos on p. 45 is the left end of this four-story frame flat. Court has banned new occupants in extreme left bay until owner, 78, repairs it.

(continued from p. 45)

able program" for doing so—a prerequisite to any federal aid for public housing or slum clearance under the 1954 Housing Act. Only others: Clarksville, Tenn. (H&H, Jan. '55, News) and Chicago. Moreover, as Urban Renewal Commissioner James W. Follin observed in handing Mayor Donovan HHFA approval of his "workable program": "Relatively few people realize that the Housing Act of 1954 is the most significant federal step yet taken to aid localities in their fight for better housing, better living conditions and greater community stability."

That Somerville's leaders understand this is probably attributable to a combination of circumstances that occurs often enough to suggest it may be typical of the wellsprings of rehabilitating cities:

1. Somerville underwent a Grade A civic row over its first (and only) redevelopment project under the Housing Act of 1949—a plan to root some of its worst slum housing out of 16½ acres of low-lying "Brick Bottom" land and redevelop it for industrial use. Residents of the area, attached to their ancient dwellings, voted 319-0 against redevelopment; it was only when the rest of Somerville was organized behind the project that the final plans squeaked through the aldermen, six-to-five. Says President Joseph McHugh of the Chamber of Commerce: "Somerville doesn't want another Brick Bottom where the only solution is to convert a residential area into industrial uses."

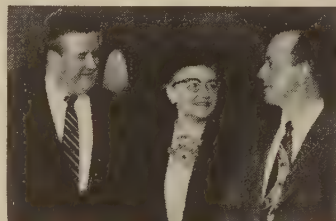
2. In the persons of Alan McClennen, city planning director, and Ralph Taylor, redevelopment chief for the Somerville Housing Authority, the city had two energetic professional housers who saw the new national policy on urban renewal developing and got to work long before the new housing law was passed. They sold the idea to Mayor Donovan. His support persuaded the inactive Community Council, local Red Feather agency, to back the plan. The Chamber of Commerce, Rotary, Kiwanis, Lions clubs were soon on the bandwagon.

3. With some guidance from the Boston Metropolitan Housing Assn. and other experts, a local neighborhood association took shape in Ward I (where the city expects to carry out its first urban renewal project).

4. Editor George E. Connor of the weekly *Somerville Journal-Press* gave both the Brick Bottom redevelopment plan and urban renewal such detailed and perceptive coverage, backed by editorials, that he won a citation for community service from the Controlled Circulation Newspapers of America. Sample: "The basic issue is whether our people are going to control their physical environment or . . . be conquered by . . . ugliness, congestion and property blight".

Plan for survival. Somerville's officially-approved workable program for urban renewal not only follows the rules laid down by HHFA (H&H, Jan '55, News), but was instrumental in helping Jim Follin's office write them. A housing code has been drafted, a comprehensive overhaul of zoning is under way, land use has been studied and replanned, an urban renewal committee of city department heads has been named to carry out the scheme. Displaced families may go into public housing (HHFA has approved 42 new units and Massachusetts has approved an old-age housing project of 75 units). Luckily, Somerville has no Negro housing problem; its 95 nonwhite families do not dwell in substandard quarters. Yet

PEOPLE LIKE THESE TRY TO MAKE RENEWAL WORK



CITIZENS' LEADERS: Pres. John Griffin of Community Council; Secretary Mrs. Goodwin R. Prentiss and President Francis Burns of E. Somerville Neighborhood Assn.



EDITOR George E. Connor of local "Journal-Press" has given strong support to redevelopment and urban renewal. Somerville lacks the money for complete rebuilding.



SELLING RENEWAL to city aldermen is continuing job for Redevelopment Chief Ralph Taylor (2d from left, back to camera). He cited house pictured at top right of this page as example of what might be torn down. "Would people object to that?" he asked. Predicted pro-redevelopment alderman in light coat: "They'll object."

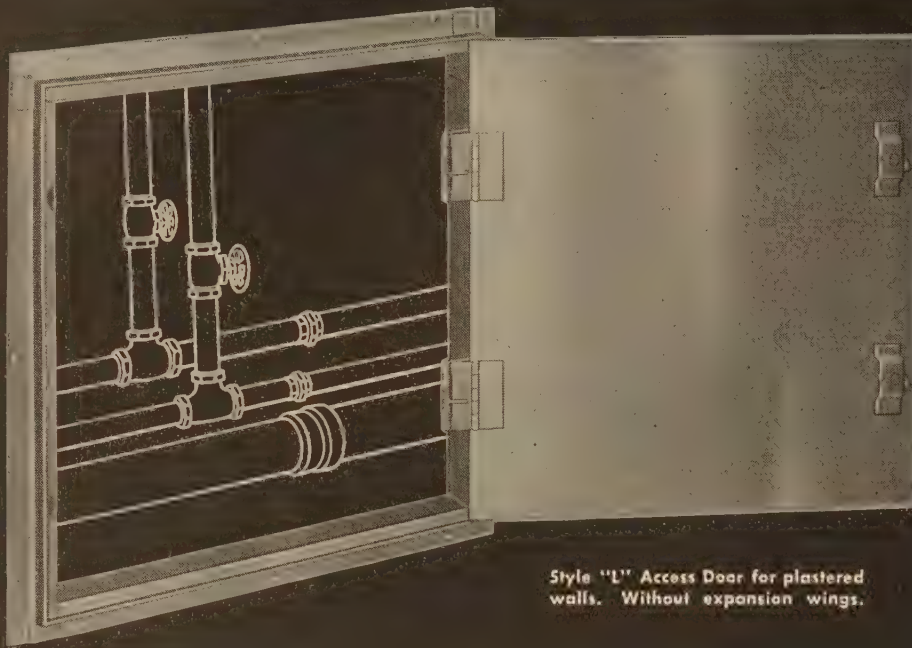


HUDDLE with Mayor Donovan (l, foreground) brings in (l to r) Secretary Wallace Sinclair, a high school teacher on leave; Planning Director Alan McClennen; Redeveloper Taylor. Much of renewal's success may hinge on Donovan's re-election in Nov. Some likely opponents may capitalize on the emotional appeal of opposing necessary demolition of ancient housing.

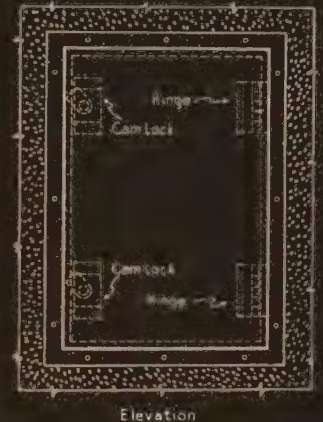
(continued on p. 49)

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go in faster...last longer



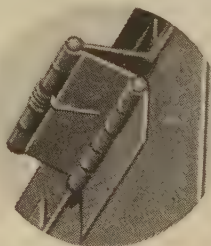
Style "L" Access Door for plastered walls. Without expansion wings.



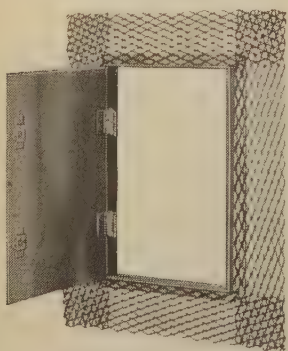
Elevation



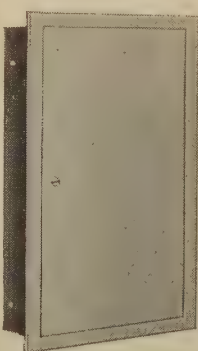
Detail of Panel Without Expanded Metal Wing



Exclusive spring hinge lets door open 175°, for convenient access to key points in plumbing, heating, electrical, and refrigeration systems. Door is removed quickly by extracting hinge pin. Number of hinges and cam locks determined by size of door.



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for all their promise, Somerville's plans are only good intentions so far. As Editor Connor says: "Where trouble will come is when you talk of tearing down this house or that house." Even some of the top people behind urban renewal admit it may well take "at least five years" before physical change will be noticeable in the city.

Somerville, sadly, is a town with almost all the handicaps a city could have. Yet the enthusiasm and drive of its two devoted young

PEOPLE: Joe McMurray named New York housing chief, Charles Abrams rent boss; Oakley Hunter is HHFA counsel

Joseph P. McMurray, who gave up his position as staff director of the Senate banking committee only last August to become executive director of New York City's housing authority, will probably be named state housing commissioner by Gov. **Averell Harriman**. The job might mean a pay cut but was regarded as putting able Democrat McMurray in the limelight where his career could grow more. McMurray, father of six, got \$20,000 a year from the public housing post, would get only \$17,000 in the state



McMURRAY

job, where he succeeds Republican **Herman Stichman**. There was a possibility that **Gerald Carey**, who preceded McMurray as executive director of the housing authority and was retained as assistant to the chairman, would step back into his old job. **Dr. Robert C. Weaver**, 47, chairman of the National Committee Against Discrimination in Housing, was appointed deputy commissioner. He is director of opportunity fellowships for the John Hay Whitney Foundation.

Charles Abrams, Poland-born Manhattan lawyer and housing expert who was '50-'54 vice chairman of the committee against housing discrimination, became \$17,000-a-year state rent administrator. Abrams' appointment was viewed as a reward for Liberal Party support of Harriman's campaign. The governor named McMurray and Abrams to a committee to recommend a new, long-range state housing program. Indications were that Harriman favored more housing subsidies for low- and middle-income families—a stand the building industry would dispute.



ABRAMS

Thomas J. Sweeney, director of VA's loan policy service, was named acting administrator of loan guarantee after **T. B. King** left for a vice presidency with National Homes Acceptance Corp. Sweeney is 50, was educated at St. Ignatius College in Cleveland and later at Georgetown University. He had a number of jobs before he joined VA in 1944, including time as an attorney for the old HOLC, private mortgage lending, and the OWI. Sweeney's salary is \$10,800 (\$1,000 under what King was getting), no great munificence for a man directing such a body of loan underwriting. Whether he would be officially confirmed as head man of VA's housing branch was doubtful. Disgruntled Democrats had already expressed their suspicion that the administration would bring in a political appointee.

housing professionals has spread to many of its other leaders in something like a single year. One big remaining question: can renewal be rammed down the throats of the people whose sick real estate is infecting the city? Or can it be sold to them? The observation of a US Public Health Service man who is familiar with rehabilitation problems and prospects throughout New England is probably apt. Said he: "If Somerville can do it, any city can."

Prof. Ernest Fisher, director of Columbia University's Institute for Urban Land Use and Housing Studies, will direct research and publication of a "Study of FHA Insurance Reserves" made possible by a \$40,000 grant from four organizations. The **Life Insurance Association of America** is making up more than half the sum. Other contributors: **US Savings & Loan League**, the **Mortgage Bankers Assn.** and the **National Association of Mutual Savings Banks**.

T. Wade Harrison, Florida lawyer who has served with the Home Loan Bank Board since 1934, gave up his position as general counsel to become Washington counsel for the US Savings & Loan League. Creation of the new post was a move by the league to expand its headquarters section.

Neal J. Hardy, director of NAHB's Washington center, was named by HHFA to head a small group formulating minority housing policy. Hardy's group will carry on lines of action developed at the recent two-day conference held by the agency (H&H, Jan. '55, News) and work at establishing future programs.

Architects **Walter Scholer & Associates** of Lafayette, Ind. have finished plans for a prefab school for National Homes, a possible answer to growing classroom shortages. The company has already received an order from the town of Lafayette for a 16-room building. Tentative selling price has been estimated by President **James Price** at "perhaps half as much as for an ordinary school."

Rep. **Oakley Hunter**, 38-year-old lawyer from Fresno, Calif. moved down from Capitol Hill last month and was sworn in as general counsel of HHFA. Democratic critics saw the appointment as a clear case of Republican pressure to get **Berchmans T. Fitzpatrick** out (H&H, Jan. '55, News) and one of their own men in. Some were even convinced it was the Republican Californian contingent that had engineered Fitzpatrick's removal.



HUNTER

Hunter is a genial, towering (6'4½") man who served two terms in Congress. After graduating from the University of California's law school in 1940, he worked for a law firm in Fresno. During the war he was a special agent for the FBI until 1944, then switched to Naval Intelligence. He has no background in housing at all, but feels that it is nothing to apologize for since the only lawyers who do are men who have been around Washington for 20 years, developing their patterns of thought under Democratic administrations. He has a solid voting record against public housing. He explains this somewhat in the manner that Administrator **Al-**

bert M. Cole did when he took over after service as a Kansas representative: while in office a Congressman represents his constituents; if he is named to an office on the national level he carries out his duties with the general public in mind. "Had I represented a Manhattan district," said Hunter recently, "I would have been a supporter of public housing." He is a staunch advocate of the policy of extending home ownership to the greatest number of people possible and sees a "great future for urban renewal."

Charles Frederick Chaplin, elected to the Cook County (Ill.) Board of Commissioners in November by a huge plurality, has been appointed chairman of the county's building committee. In his new post, he has already resolved to tackle the county's building codes—no plumbing code now exists, for example, at all—and get something new on the books. Chaplin has an outstanding record as a businessman and administrator, is vice president of the Allied Paper Mills and for the past six years has served without compensation as the mayor of Northbrook, one of the county's fastest-growing communities.

DIED: Lawrence Ottinger, 70, board chairman of US Plywood Corp., which he founded in 1919 with a borrowed \$500 and built into the largest



OTTINGER

producer in the field, Dec. 19 in Scarsdale, N. Y.; **Francis M. Cutting**, 88, veteran realtor of Stockton, Calif., one of six men responsible for passage of the California Real Estate Act, Dec. 24 in Stockton; **Barrett Pennell**, former vice president of AIA's Philadelphia chapter, responsible for the restoration of many old homes and farmhouses in the area, Jan. 2 in suburban Wynnewood.

CORPORATE CHANGES: John W. Pease, one of the organizers of the Prefabricated Home Manufacturers' Institute 11 years ago and its second president, elected president of Pease Woodwork Co. to succeed **James W. Pease Sr.**, who became chairman of the board; **Edwin J. Schwanhauser**, elected president of the Worthington Corp. succeeding **Hobart Ramsey**, who became chairman; **R. B. Crean**, elected president of Reflectal Corp. (a Borg-Warner subsidiary) to succeed **R. S. Ingersoll**, who will devote full time to his duties as administrative vice president of Borg-Warner; **Norman M. Cornell**, to the presidency of the Gibson-Homans Co. in Cleveland, succeeding **Harold Allison**, who became chairman.

Joseph H. Orendorff, former head of HHFA's ill-starred research division—dead for lack of appropriations—landed a new job as head of the agency's division of international housing. Most of the activity in this field is carried on by Harold Stassen's Foreign Operations Administration; HHFA's part of the job is to gather technical material and train men for FOA to send abroad.

NAMED: George P. Shutt, building specialist with TIME and long-time (1932-53) advertising director of ARCHITECTURAL FORUM, as director of sales for NAHB's National Housing Center; Real-
tor Clarence M. Turley, as chairman of a 16-man committee in St. Louis studying the city's long-range housing needs; **P. S. Luttrell**, former FHA director in Houston, as "Builder of the Year" there by the local home builders' association; **Frank E. Oman** of San Francisco, as president of the Home Builders Council of California; **Albert E. Knorp** as executive secretary; **Hartford (Conn.) Architect Keith S. Heine**, as president of the Connecticut chapter of AIA; **Irvin R. Schildein**, as president of the Chicago Mortgage Bankers Assn.; **Gilbert W. Denges** of the William-
son Heater Co., as president of the National Warm Air Heating & Air Conditioning Assn.



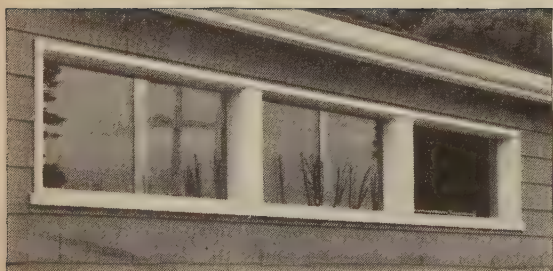
Thoroughly proved in a coastal area of wind-swept winter rains.

No sash sections to obstruct the view

Glass lifts out to simplify painting or cleaning

The Pierson Sashless Window combines only the essentials of frame, glass and a simple brass lock. It eliminates sash sections for an unobstructed view, and does away with puttying and sash painting. It comes knockdown, in a compact package, and takes only a few minutes to assemble. The four fabricated pieces are so moulded that the trim is complete for wallboard or plaster, inside—and for siding or stucco, outside. The sliding panes of 3/16" crystal glass are not included, but are readily obtainable from any local glazier.

The lower price of the Pierson Sashless Window, combined with the savings in hardware and labor, provide greater economy for both builder and home owner. Available in 22 sizes from 3 to 8 feet long, and from 2 to 3½ feet high. Address inquiries to: **Ernest Pierson Co., 4100 Broadway, Eureka, California.**



Ideal for window walls and wider distribution of light.

FHA efforts to encourage quality standards produce first MPR changes; more under study

FHA is considering a radical revision of its minimum property requirements to encourage quality construction.

Neil Anthony Connor, 47-year-old Boston architect who became the agency's director of architectural standards last August, revealed the studies in a talk at NAHB's Chicago convention last month. He said:

"Possibly, we can work out a system which will not penalize the builder of the lowest cost house and at the same time give better recognition to better materials, better design and better construction. Perhaps we might end up with two documents—a set of minimums and a set of preferred standards. The minimums might be less stringent and more simple than our present MPRs."

H&H staff



CONNOR

"The preferred standards, on the other hand, might represent our best design thoughts and might encourage something other than minimums which many feel is the case with our MPRs now."

Only tentative. Any such overhaul of FHA rules, Connor carefully noted, "will take time." The agency so far is not committed definitely to the basic idea. But the fact that Connor broached it, even as a trial balloon, struck many a builder as indicative of the serious re-thinking top FHA officials are willing to give to some of their oldest habits in an effort to boost better housing. It is noteworthy, too, that FHA Commissioner Norman Mason personally read and approved Connor's talk in advance.

Up to now, the actual results of FHA's new emphasis on good design have been less sweeping than such long range plans as a dual set of standards. Even so, thinks Connor, some misconceptions have arisen.

"We want to recognize quality," he said in his Washington office recently. "But people think we're going to make the MPRs stiffer and stiffer to do it. I'm opposed to this." Where FHA may stiffen an MPR, says Connor, the objective will be cheaper maintenance or operating expense, or a more liveable home for little more construction cost.

It was with these items in mind that the agency recently asked the building industry for comment on a possible 10% step up of insulation minima. The method: reduce the allowable heat loss in a house from 60 Btu to 55 Btu per hour per sq. ft. of floor. Some industry sources feared this would penalize or limit large glass areas because they involve too much heat loss. To this, Connor notes that FHA is not yet committed to the proposal, and moreover that he certainly does not intend to penalize glass.

MPR changes recently ordered into effect

involve insulation, concrete work and heating requirements. Their purpose was explained this way by Commissioner Mason: "We are not acting in the best interests of the home owner unless in our appraisal we encourage the installation of equipment with long life and low maintenance costs." The changes:

► Insulation must be labeled to permit ready identification by inspectors. Installed batt or blanket insulation must show the manufacturer's or national distributor's name, the material thickness and maximum variations in this. Reflective insulation must show manufacturer's or distributor's name and catalog name and number. If a builder puts loose fill insulation in ceilings, he must attach and sign a card in the attic showing: thickness of the fill, density, that density will maintain at least 90% of the stated thickness, name of the manufacturer and date installed.

► Starting shortly, requirements will be slightly tightened for batching of fine and coarse aggregates. Concrete mixes will require minimum compressive strength of 2,000 psi and cement content of not less than 5 bags per cu. yd. FHA field offices can accept nonconforming mixes and materials if local experience and other evidence indicates satisfactory results.

► New heating requirements adopt extensively the commercial codes and standards set forth by the American Society of Heating and Ventilating Engineers in their ASHVE Guide. Other industry codes—shorter and simpler versions of the Guide—replace long indexes in FHA state and regional MPRs. So complex are these changes that FHA advised architects to compare revisions with their local MPRs to find the differences.

Education, not orders. On the design front, Neil Connor prefers education of appraisers and underwriters across the nation to orders from Washington. It is nearly hopeless, thinks Connor, to write regulations against bad design. His approach: "More freedom for underwriters to discourage it." Connor has ambitious plans to help FHA underwriters

in the 75 district offices get "expert advice" on valuing for amenities.

He would like to add 18 top-flight regional experts (6 architects, 6 structural engineers, 6 mechanical engineers) to advise the underwriters. "Liaison between Washington and many insuring offices has been weak," he says.

Should FHA change methods to encourage quality?

FHA should revise its present formula for valuation if it really wants to get results in boosting quality standards.

So says Leonard Haeger, NAHB research and technical director.

Under the present setup, FHA cost allowances are based on averages. If \$250 is the average cost of a furnace, a \$400 heating system would not be credited with \$400 in FHA's evaluation which governs the size of the all-important down payment. The averages are based on houses considered typical.

To encourage quality equipment, thinks Haeger, FHA instead should base its valuations on the house that *ought to be typical*, rather than the one that *is typical*. Says he: "The architectural section should set up goals instead of writing rules. The answer to reflecting better quality is valuation. The clue to how to do it is *objectives*. Rate the ideal item at 100, and graduate items that are not quite so good from there down."

Anticipating argument on this theory, Haeger explains: "If you don't buy this idea, ask yourself: 'Does FHA's local cost man understand what the extra cost of the better product is?' 'Has the chief underwriter in each insuring office the guts to do something to credit quality?'"

A frank answer to the first question was given HOUSE & HOME by a top FHA official: "FHA's cost analysis system is a good system. But it hasn't worked right in the past because 1) there are not enough people in the insuring offices to carry it out and 2) therefore the long range studies of costs keep getting pushed into the background." Instead, the valuers and cost study men "keep getting sent out to put out fires."

Negro legal drive to force open occupancy in all FHA, VA projects hits Bill Levitt

The nation's biggest homebuilder was abruptly confronted last month with his industry's biggest long range problem: racial discrimination in government-backed housing.

The Natl. Assn. for Advancement of Colored People sued in Philadelphia federal court in an effort to compel William J. Levitt's, Levitt & Sons to sell some of its Levittown, Pa. homes to Negroes. It asked an injunction restraining Levitt from "discriminating" against Negroes "as long as he uses the credit, guarantees, insurance, approval and assistance of the federal government" for his big Bucks County, Pa. development. Also named defendants: FHA Commissioner Mason, VAdministrator Harvey Highley, and local directors of FHA and the VA mortgage division.

The suit asserted Levitt "throughout the years has consistently refused to sell to Negro families homes in any of his projects." It was the eighth local case brought in recent months

by NAACP in its legal battle to make compulsory open occupancy the price of federal aid to private housing. Thurgood Marshall, who successfully argued before the US Supreme Court against school segregation, headed the NAACP team of attorneys.

The suit introduced a new contention in racial discrimination litigation. It asked a discrimination injunction on the ground that unincorporated Levittown, Pa. is really a town and that the builder's policy of barring Negroes is tantamount to a city ordinance refusing Negroes residence there. The complaint contended Levitt has a monopoly on all new construction in Levittown and thus is serving as a public utility.

A companion suit was aimed at Olney Gardens, an FHA rental project in North Philadelphia. It was filed on behalf of a Philadelphia couple and other Negroes who said they were refused apartments.

(NEWS continued on p. 58)

HOUSING STATISTICS

Administration asks \$965,000 to improve data on building

Big news for champions of better statistics for the building industry was approval by the Budget Bureau of requests for \$965,000 more for BLS and the Commerce Dept. They now keep track of the \$50 billion industry on \$400,000 a year. The President was to ask Congress for the newly-approved sum in his budget message. Some \$800,000 of the total would go to Commerce (specifically to its Business and Defense Services Administration) and \$165,000 to BLS for the next fiscal year. This is what the new money would buy:

From Commerce:

1. Greater accuracy and dependability of the dollar volume of new construction activity.
2. Statistics on alterations and improvements for all types of construction (probably to be done by the Census Bureau).
3. An annual study of materials requirements for selected types of construction.
4. An inventory report, semiannual or annual, of residential vacancies.

From BLS:

1. An annual survey of the characteristics of home builders' operations, similar to the 1949 study (see p. 238).
2. A survey of size, price, type, etc. of today's homes.

In addition to the \$965,000 described above, the budget will call for \$500,000 for an intercensus housing inventory, to chart the changes since 1950. This would be done on a sample basis and hence would yield information on a national basis and by metropolitan vs. nonmetropolitan areas, for example. It would not break down vacancy rates or other data by state or locality. Such broad statistics have limited use. But with increasing attempts to get a valid estimate of vacancies—as barometer of the health of the housing boom—even national rates would be illuminating.

MORTGAGE MARKET QUOTATIONS

(Originations quoted at net cost, secondary market sales quoted with servicing by seller)
As reported to HOUSE & HOME the week ending Jan. 14

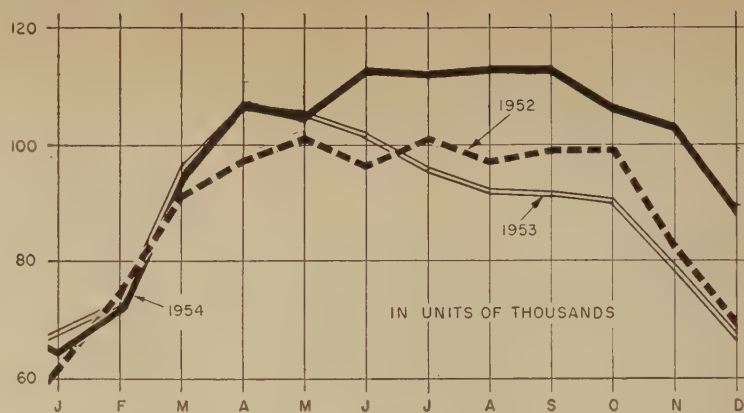
City	FHA 4½'s		5% equity or more VA 4½'s		No down payment VA 4½'s	
	Origina- tions	Secon- dary	Origina- tions	Secon- dary	Origina- tions	Secon- dary
Boston local	par-101	a	par-101	a	par-101	a
Out-of-state	a	99-par	a	99-par	a	97-99
Chicago	97-99	99-par	97-99	99-par	96-97	98-99
Denver	99-par	99-par	99-par	99-par	99-par	99-par
Detroit	97½-99	a	97½-99	a	96½-97	a
Houston	par	par	99½-par	99½-par	97½-99	97½-99
Jacksonville†	par	par	par	par	97-98††	97-98††
Kansas City	99-par	par	99-par	par	a	a
Los Angeles	99-99½	99-99½	98-98½	98-98½	97-97½	97-97½
New York	par	par	par	par	par	par
Philadelphia	par	par	par	par	99-par	99-par
San Francisco	par	par	par	par	95½-98	95½-98
Washington D.C.	par	par	par	99½-par	99½-par	98-par

‡ No market.
* Probable prices throughout Pacific Northwest.

† Probable prices throughout Florida.
†† Without closing costs in cash.

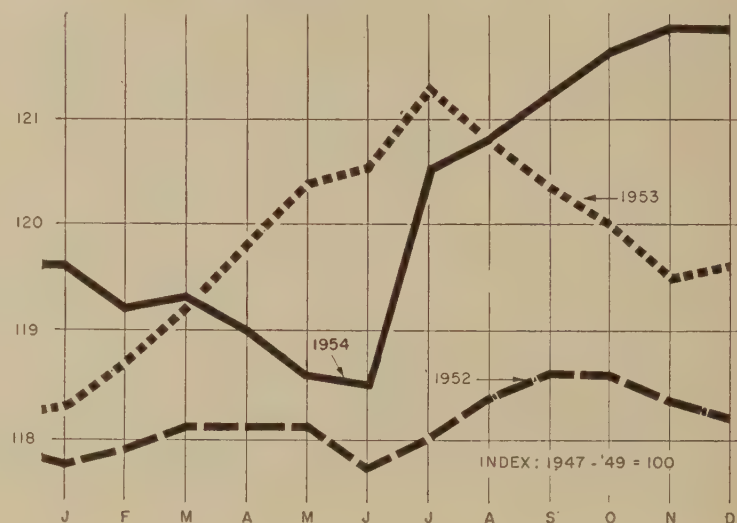
SOURCES: Boston, Robert M. Morgan, vice pres., Boston Five Cents Savings Bank; Chicago, Maurice A. Pollak, vice pres. & secy., Draper & Kramer Inc.; Denver, C. A. Bacon, vice pres., Mortgage Investments Co.; Detroit, Robert H. Pease, pres., Detroit Mortgage & Realty Co.; Houston, John F. Austin Jr., pres., T. J. Bettes Co.; Jacksonville, John D. Yates, vice pres., Stockton, Whatley, Davin & Co.; Kansas City, Byron T. Shutz, pres., Herbert V. Jones & Co.; Los Angeles, John D. Engle, pres., Insurance Funds Mortgage Co.; New York, John Halperin, pres., Halperin & Co.; Philadelphia, W. A. Clarke, pres., W. A. Clarke Mortgage Co.; San Francisco, William A. Marcus, senior vice pres., American Trust Co.; Washington, D. C., George W. De Franceaux, pres., Frederick W. Berens, Inc.

PRIVATE HOUSING STARTS



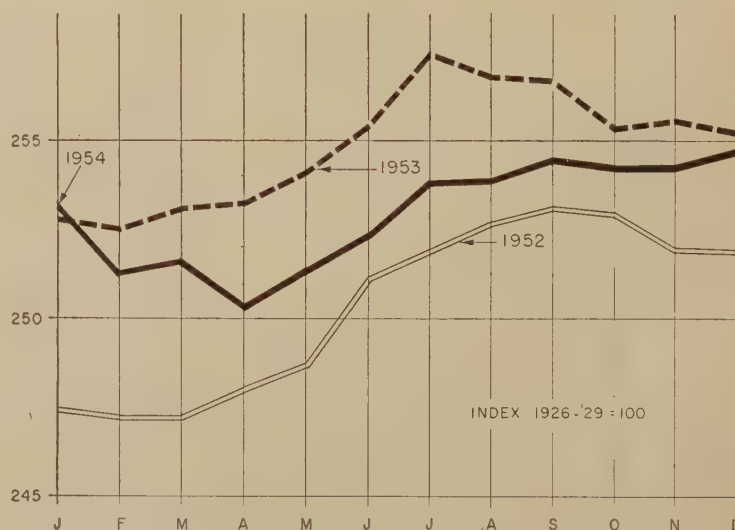
Private housing starts for December totaled 89,600, below November's 102,700, but an all-time record for December. First preliminary tallies for 1954 put private starts at 1,196,100, and total nonfarm starts at 1,215,500. This made 1954 second only to 1950 in starts, but first in dollar volume—\$12,035,000,000 for nonfarm new private housing.

BUILDING MATERIALS PRICES



BLS wholesale building materials prices index crept up one-tenth of one point from 121.9 in November to 122.0 in December. Minuscule increases for lumber and wood and for concrete ingredients accounted for the rise.

RESIDENTIAL BUILDING COSTS



E. H. Boeckh & Associates' index of residential building costs rose 0.3 points to an index of 254.7 in December after two months at the level of 254.4. Percentage increase was only 0.1%.

STOP THIS THREAT TO REPUTATION

with masonry finishes bearing this seal---



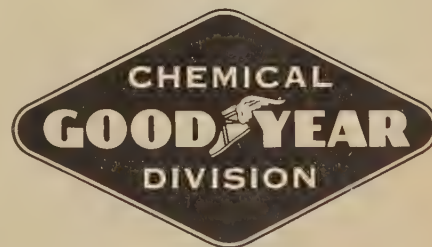
Paint often is the outward appearance by which the work of architects and builders is judged. Premature failure endangers not only the surface protected, but the reputations of architect and builder. That's why it's important to be informed on paints and their application. This is especially true when it comes to masonry.

Masonry surfaces are difficult to keep painted. The alkalies found in all concrete combine with moisture to attack and destroy conventional paints, in as little as a few months. What is needed is an alkali-resistant finish—one made with PLIOLITE S-5—first and finest of the synthetic rubber resins.

Paints made with PLIOLITE S-5 have thoroughly proved, in almost a decade of extensive tests and wide use, they do a better job longer on all types of masonry. The reasons for their lasting beauty are: 1. Extreme resistance to alkalies. 2. Excellent weatherability. 3. Good self-cleaning properties. 4. A breathing-type water repellency.

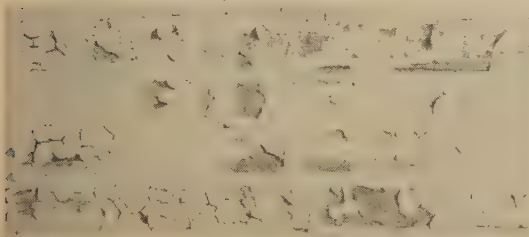


Protect your reputation by learning more about paints and masonry painting. Write for the free booklet, "Paint Magic For Masonry," and a list of more than 200 brand names by leading manufacturers, to: Goodyear, Chemical Division, Akron 16, Ohio



PROTECT THE SURFACE AND YOU PROTECT ALL—including reputation. Premature paint failures such as these can be prevented with masonry finishes based on PLIOLITE S-5.

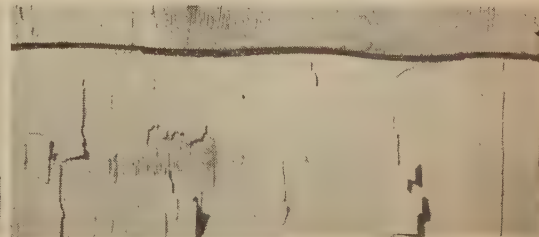
ON BRICK:



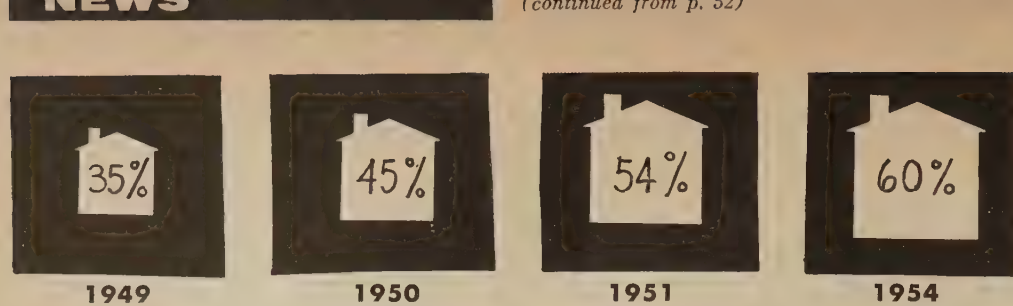
ON BLOCK:



ON ASBESTOS-CEMENT SHINGLES:



Pliolite—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio



AVERAGE HOME SIZE is growing. BLS finds the percentage of nonfarm, one-family houses over 1,000 sq. ft. has jumped from 35% in 1949 to 60% during the first quarter of last year.

Houses—bigger, costlier

New BLS figures, first in three years, show new, one-family homes are 5% larger than in 1951; average price is up from \$10,800 to \$12,300

Like US families, US homes are growing bigger and bigger and more and more expensive.

Last year, according to the Bureau of Labor Statistics, the average floor area for new nonfarm, one-family houses were 1,140 sq. ft.—about 5% bigger than homes built in 1951. The average price was \$12,300—compared to \$10,800 in 1951, \$10,200 in 1950 and only \$9,700 in 1949.* Some 60% of 1954 homes were basementless, and 82% were of frame construction. More than 77% were going up in metropolitan areas, only 23% elsewhere. The South was building more than the West.

It has been three years since BLS has been able to produce any such report on the kind of house the nation is getting as the one issued Dec. 30; Congress has been too tight fisted with money. For that matter, it still is, although the industry has hopes of improving its statistical status next fiscal year (see p. 52). The 1954 study of housing characteristics, covering 5,000 projects and 30,000 dwellings started in the first quarter, was chiefly financed by three trade associations (Structural Clay Products Institute, Aluminum Window Manufacturers' Assn. and Ponderosa Pine Woodwork Association). Hence BLS delved into only a few characteristics of homes. The resulting statistics, however, break a three-year drought of solid facts on housing trends.

The survey disclosed significant differences in the average size and price of houses going up in four BLS-devised regions. The South had the biggest houses. Average prices were highest in the Northeast. Statisticians cautioned against drawing direct comparisons between average size and price, however, because the samplings involve different distributions.

	US total	North-east	North-central	South	West
1-family homes started...202,000	36,900	49,400	69,000	46,900	
Median sale price....\$12,300	13,800	13,100	10,800	12,600	
Av. floor area (sq. ft.)	1,140	1,120	1,020	1,220	1,180

BLS observed that in metropolitan areas, where more than three-fourths of last year's nonfarm units were being built, the median intended sales price of houses was \$12,900. This compares to the national average of \$12,300 and an average of only \$10,100 for

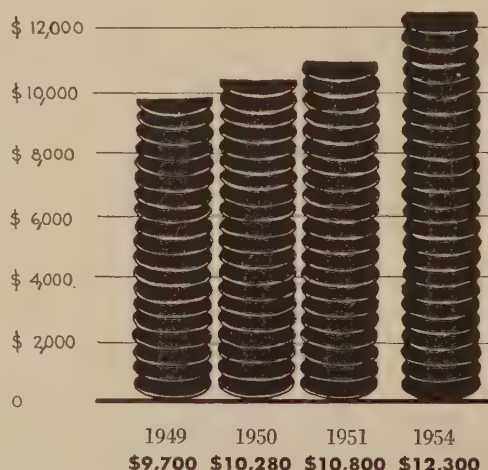
* Figures are reasonably comparable. 1954 is median proposed selling price for one-family structures all nonfarm areas; 1951 and earlier figures are median purchase price of homes in 10 metropolitan areas.

houses in nonmetropolitan areas. Across the nation, a quarter of the houses started were priced below \$10,000. Another quarter were priced from \$12,000 to \$14,999. One-tenth were intended for the high-price market above \$20,000.

Five-year trends. How much the average house has recovered from the pinch on size imposed by the postwar housing shortage was pointed up by the BLS study. The percentage of US one-family homes 1,200 sq. ft. or bigger has nearly doubled in the last five years:

1954.....	36%	1950.....	20%
1951.....	29%	1949.....	17%

Offsetting this good news, however, is the fact that the proportion of too-small houses is rising again. Ten per cent of the '54 one-family houses in BLS' study were less than 700 sq. ft. It was only 4% in 1951. However,



MEDIAN SALE PRICE of nonfarm, one-family houses is also on the rise. BLS' figures show it climbed from \$9,700 in 1949 to \$12,300 last year.

the number of homes between 700 and 1,000 sq. ft. is falling (see table, below).

Among comparative materials, BLS found aluminum continuing to gain on other kinds of window frames for the one-family home. But wood appears to have improved its position since 1951.

FIVE-YEAR TRENDS IN CHARACTERISTICS

	1954	1951	1950	1949
Floor area (sq. ft.)	percentage of houses			
Less than 700	10	4	5	9
700-799	8	11	14	21
800-999	20	31	35	35
1,000-1,199	24	25	25	18
1,200-1,499	19	n/a	n/a	n/a
1,500-1,799	10	n/a	n/a	n/a
1,800 and over	n/a	11	6	5
1,800 and over	7	n/a	n/a	n/a

n/a—not available. 1954 covers 1st quarter; 1951 covers 1st quarter; 1950 covers 2d and 3d quarters; 1949 covers 3d and 4th quarters.

Window frames	percentage of houses			
Wood	61	57	60	71
Steel	19	28	29	24
Aluminum	18	14	11	5

1954 figures lump "majority" with all window frames of each type; earlier figures gave no breakdown. Unknowns are omitted, hence figures may not total 100.

Among '54's first quarter homes, BLS found one of the widest regional differences in the popularity of basements. While 36% of US homes had full basements and 5% partial basements, this was a compound of very few in the South and West against a preponderance of cellars in the Northeast and North Central states.

PERCENTAGE OF ONE-FAMILY HOMES WITH BASEMENTS

	US total	NE	N Central	South	West
No basement	58	21	44	73	79
Full basement	36	63	53	20	18
Partial basement	5	15	2	4	2
Unknown	1	1	1	3	1

Frame construction predominates. BLS found 82% of one-family homes were frame type. Of these, about 40% also had wood facing, 25% brick facing. In the West, stucco on frame was the prevalent type. It was being used on about half the one-family housing. In the North, asbestos shingle facing was as popular as wood. The two types together accounted for more than two-thirds of the homes under construction.

EXTERIOR WALL CONSTRUCTION—percentage distribution

	US total	NE	N Central	South	West
Masonry	13.6	7.4	12.4	18.6	12.4
Frame	81.7	88.8	82.0	76.1	82.8
Brick facing	19.5	13.7	22.5	31.3	3.4
Wood facing	31.4	34.1	44.2	25.7	23.8
Asbestos shingle	13.8	34.1	9.0	13.9	2.7
Other	17.0	6.9	6.3	5.2	52.9*

* Majority is stucco

Modular measure savings explained at conference

Savings of 10% in the cost of masonry work, 15% in field labor and 15% in drafting room expense were credited to the use of modular methods at a building industry meeting in Washington sponsored by the Building Research Institute and backed by eight groups including NAHB and AIA.

Contractors, architects and manufacturers gave strong testimonials to the benefits of modular measure, a system for simplifying

(continued on p. 62)

on 700 Electronic Comfort homes!

*Franklin L. Burns, Denver home builder,
offers smart, low-cost "Cliff May Magazine Cover Homes"
with Electronic Moduflow comfort*

THE home-building pace in the Rocky Mountain area continues to increase as the Burns Construction Co. opens its new Harvey Park Subdivision in Denver—a project of 700 *electronic comfort* homes!

Harvey Park homes will have a variety of seven different styles in the "Cliff May Magazine Cover Homes" design, one of which you see on the opposite page.

These smart looking homes offer a garden and patio distinctively blended into the living area. They range in price from \$11,500 to \$16,000.

Builder Franklin Burns wanted to assure the ultimate in comfort in his houses—in all price ranges. That's why he's standardizing on the Honeywell Electronic Moduflow Temperature Control System.

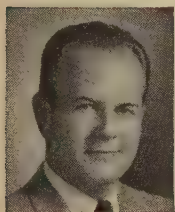
Electronic Moduflow is the most sensitive and most practical control system available.

Moduflow features an electronic thermostat *outside the house* where the weather is. This outdoor thermostat works with an electronic thermostat in the living room, and *automatically* varies indoor temperatures as the weather changes.

Builder Burns is featuring this *electronic comfort* system in all his advertising—newspaper, radio, television, and on signs and exhibits. Prospects can readily understand and appreciate the *electronic comfort* home!

This is another reason why builders all over the country—with houses for sale in every price range—install Electronic Moduflow as standard equipment. And they're finding how profitable it is to feature this *electronic comfort* in their advertising and sales promotion.

Franklin L. Burns, a leading Rocky Mountain area builder



Frank Burns is President of the Burns Realty and Trust Co. in Denver, a leading home building and real estate firm there since 1899. The Burns Co. recently completed two large Denver subdivisions—Burns Brentwood (1,200 homes) and Burns Aurora (1,000 homes). The house you see here is one of 700 Harvey Park Subdivision homes—all with Honeywell Electronic Moduflow Temperature Control!

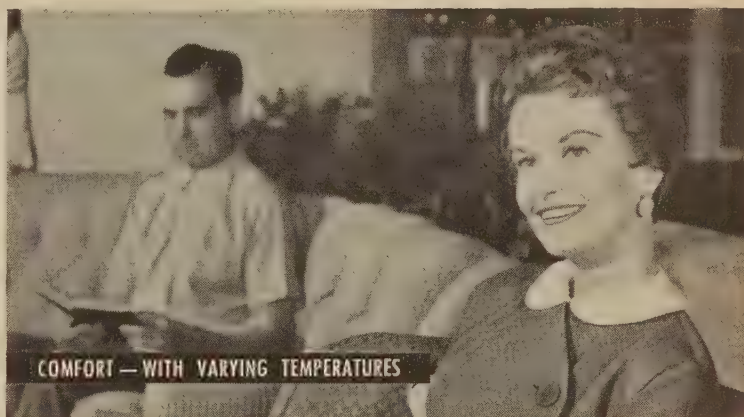
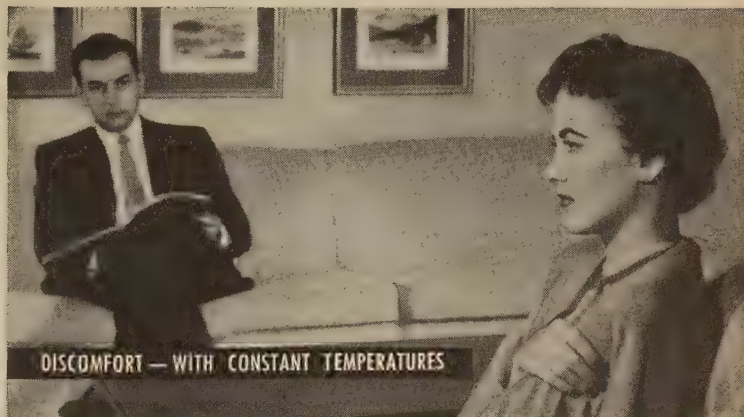
Honeywell backs up your local effort with a dynamic national advertising program in LIFE magazine. It helps create demand for your new homes, and keeps Honeywell Electronic Moduflow as a top sales tool for you!



MINNEAPOLIS Honeywell

Electronic Moduflow

112 OFFICES ACROSS THE NATION



Why people need varying indoor temperatures

Tests show that if indoor temperature is merely held constant when outdoor temperature falls, a person inside *feels* uncomfortable. This happens because colder walls "draw" more heat from the body.

With Electronic Moduflow in your homes, the colder it gets outside, the higher the temperature inside becomes. Colder walls are offset by this higher inside temperature.

For example, because of colder outside walls, a person may require 74° to feel comfortable—although he was comfortable previously at 71°. Electronic Moduflow solves this personal comfort problem *automatically*—and gives your homes a wonderful new kind of comfort.

For complete information on Electronic Moduflow for the homes you build, contact your heating contractor, your local Honeywell office, or mail the coupon shown below.

MINNEAPOLIS-HONEYWELL REGULATOR CO.,
Dept. HH-2-15, Minneapolis 8, Minnesota
Gentlemen:

Please send me information on Electronic Moduflow.

Name _____

Firm Name _____

Address _____

City _____ Zone _____ State _____

Because of Increased Sales & Production

THE
Famous

Beauti-Dor

TUB ENCLOSURE NOW at a NEW LOW PRICE!

NATIONALLY
ADVERTISED AT \$69⁹⁵*
LIST

\$46⁹⁰*
DEALER'S
PRICE

**SPECIAL PRICES
TO BUILDERS**

Feature AMERICA'S

LEADING NATIONALLY ADVERTISED
TUB ENCLOSURE

NATIONALLY ADVERTISED IN:



Watch for the BEAUTI-DOR 1955 Campaign in leading Magazines like House Beautiful, House & Garden Book of Building and Living! These ads will sell BEAUTI-DOR for you!

**INSTALL AS EASY AS 1- 2- 3
IN 30 MINUTES OR LESS!**

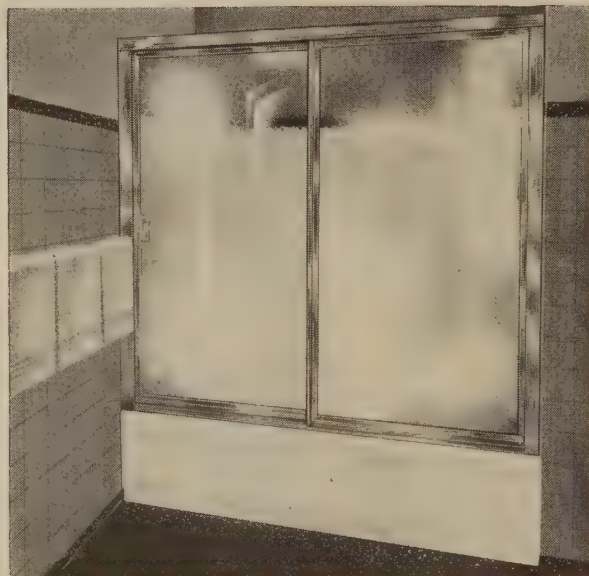


1.
Attach two side jambs.
Either before you tile or
right over existing plaster
or tile.

Place bottom rail on tub
rim. Secure it with mastic
supplied. No drilling into
tub!



3.
Slide doors into top rail
and hang in position.
That's all there is to it!



BUILDERS! OFFER THESE FEATURES

- A custom designed latest style bathroom.
- The convenience and economy of a tub and shower stall in one!
- More comfort. BEAUTI-DOR is draft-free!
- More leisure time. BEAUTI-DOR is splash-tight—no pools of water to mop—no curtain to launder or replace!
- A product of Quality. Nationally advertised in House Beautiful Magazine and other leading National magazines—BEAUTI-DOR is the name your prospects will know!

DEALERS! OFFER TOP QUALITY

- Easiest installation! BEAUTI-DOR is shipped in one carton—COMPLETELY ASSEMBLED AND GLAZED!
- Remove BEAUTI-DOR from the carton and install in 30 minutes or less!
- Heavy thick Aluminum—highly polished, heat-treated, rust-proofed!
- Thick 7/32" glass set in rubber-tight channels. Exclusive translucent pattern.
- Panels roll on double overhead cadmium plated ball-bearing rollers—open or close at the touch of a feather!
- Height overall 59 3/4". Shpg. wt. 95 lbs.

P.S. You haven't seen anything until you see the terrific BEAUTI-DOR ADJUSTABLE SHOWER DOOR—IT'S AMAZING!

*Prices slightly higher west of the Rockies.

**A FEW TERRITORIES OPEN FOR
EXCLUSIVE FRANCHISE DISTRIBUTORS**



Beauti-Dor is sold only through distributors
Manufactured by:

SHOWER ENCLOSURES, INC.

1227 WEST DEVON AVE., CHICAGO 40, ILL.

SHOWER ENCLOSURES, INC.

1227 W. Devon, Chicago 40, Illinois

Dept. HH

Please rush me the BEAUTI-DOR story, without obligation, and all details of America's Leading Tub Enclosure and Shower Doors.

I am a.....Builder.....Distributor.....Dealer
Name
Company
Street
CityState.....

dimensions of buildings and standardizing on stock sizes of materials.

Output increased. "Modular coordination does for the construction industry what efficient production methods do for the auto makers," said Contractor James E. Coombs of Morgantown, W. Va. He claimed savings on masonry work up to 10% because masons do not have to cut and fit, use less time in measuring and make fewer errors.

Said Chief Engineer J. P. Caldwell of the J. A. Jones Construction Co. of Charlotte, N.C.: "We've had a taste of modular construction and you'd have a terrible time breaking us of it." His firm found it could get face brick laid for \$42 per M rather than \$81 and field labor costs were cut 10%-15%.

Architect John R. Magney of Magney, Tusler & Setter, Minneapolis, said drafting costs were 15% less since his firm began using modular measure. As evidence that construction costs also were less, he pointed out that after a large school was completed wasted brick pieces were so few they were carried away in a pickup truck.

Inventories sliced. Speaking as a wood millwork manufacturer, C. K. Paine of the Curtis Co. said that using modular measure and standard sizes reduced 1,406 window sizes to 659 and 1,710 sash members to 797. Curtis was able to reduce its machining of wood window parts by 30% and its inventory of stock materials from 3,200 items to 1,200. He said one of the greatest obstacles to standardizing window sizes was regional preference of architects and builders for special widths of wood members, even when glass was identical in size. "The public does not know what special sizes cost," he said. "They wouldn't think of using special size bathtubs and yet they use many special windows."

Builder W. A. Simms of Dayton said that modular measure is a basic factor in the success of building components, for which he predicted a bright future. "In a few years," he said, "all items like the range, refrigerator, laundry and air conditioning will be built in as standard parts. It is evident that the use of components leads to higher quality."

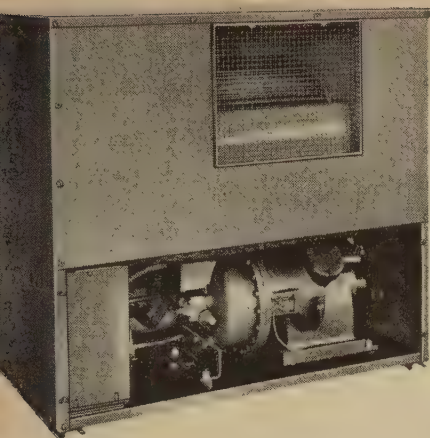
LABOR NOTES

Chicago glaziers hit by antitrust probe

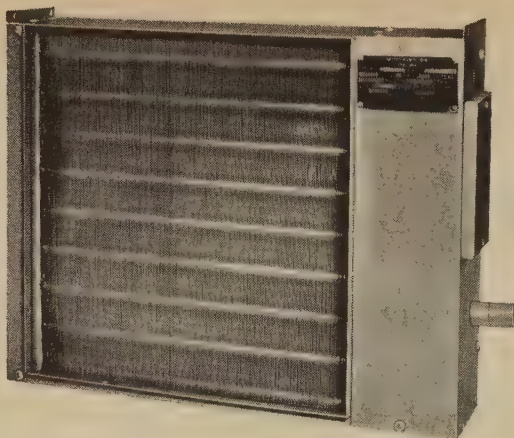
The standard way of installing glass in new homes in the Chicago area is the same old-fashioned, on-the-scene way that glaziers there have used for generations. Spurning the comfort and efficiency of a heated shop, glaziers have insisted on braving scorching sun and freezing blasts to do their work in the building operation. Whatever the advantages of such methods, these disadvantages have been apparent to all Chicago area home-builders: rigid limits on panes per day to be installed by any one glazier and shortage of

(NEWS continued on p. 66)

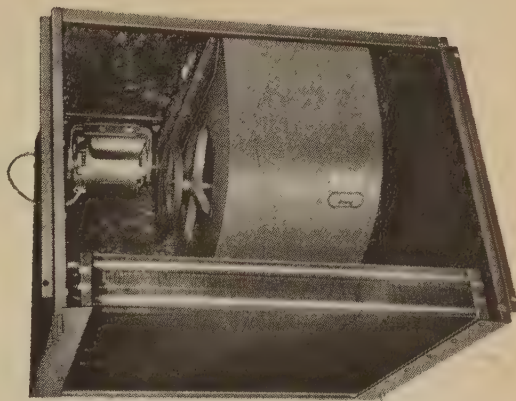
Meet 3 newcomers in Worthington's air-cooled line!



WORTHINGTON'S BRAND-NEW AIR-COOLED CONDENSING UNIT. Install it anywhere—outdoors, breezeway, garage, basement. *All electric—no water used.* It'll do an efficient job in even the hottest weather because of powerful condenser air-blowers. 2-, 3- and 5-hp.

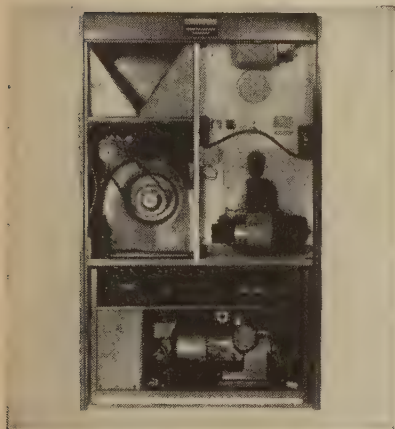


COMPANION COOLING COILS. Worthington's new broad line of Remote Duct Cooling Coils provides you with a wide range of capacities and sizes that will simplify your application and installation problems. Light-weight, easy-to-install unit is available in 2-, 3- and 5-ton capacities.

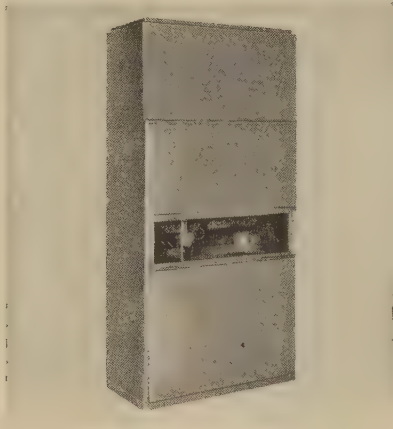


AIR-COOLED CONDENSERS. These new Worthington units feature over-sized condenser coils; powerful, quiet condenser air-blowers; continuous-duty blower motors; weather-proof cabinet. They convert water-cooled air conditioning units to air-cooled operation. 2-, 3- and 5-ton capacities.

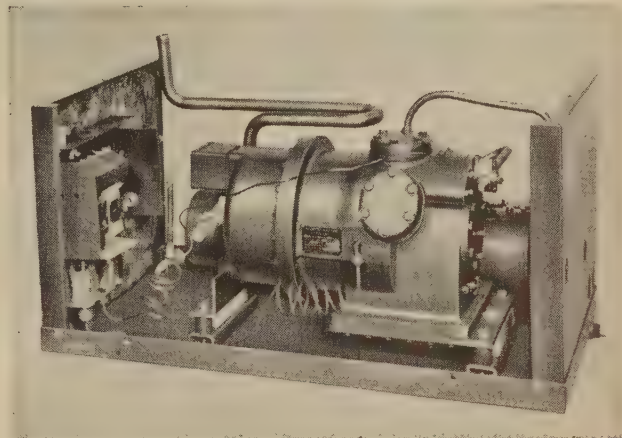
Look at these other Worthington residential units!



WORTHINGTON'S COMPACT YEAR-ROUND UNIT measures only 29" deep by 42" wide by 70" high. Ceramic-coated heat exchanger, gas or oil-firing. Completely automatic summer and winter operation.



"ADD-ON" RESIDENTIAL COOLING UNITS convert present warm air furnaces to year-round cooling and heating. When additional air delivery is needed, fan section shown on top of unit is used. 3- and 5-ton sizes.



WATER-COOLED CONDENSING UNITS. Worthington's packaged water-cooled condensing unit fits anywhere—closet, basement, attic, even in the garage. Compressor, condenser, and controls come in one compact cabinet. Use it with Worthington's Remote Duct Cooling Coil, for existing homes or new construction. Available in 3- and 5-ton capacities.



GAS-FIRED BOILER. Sectional cast iron, AGA approved for all gases. Enclosed in handsome cabinet. Readily suited for use with heating coils in packaged units for year-round application. 54,000 to 378,000 BTU input.

Want to know more about Worthington's complete line of residential air conditioning equipment? Contact your nearest Worthington dealer or write to Worthington Corporation, Air Conditioning and Refrigeration Division, Section 4.59H, Harrison, N. J.

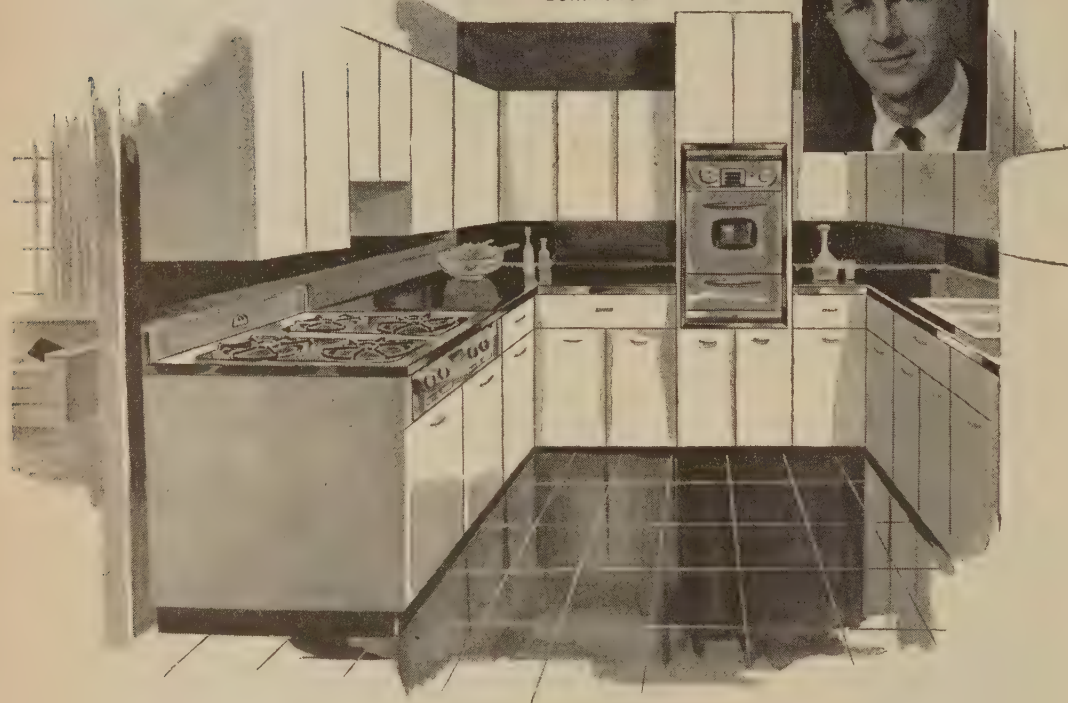
WORTHINGTON



Climate Engineers to Industry, Business and the Home

"Greatest sales tool I've seen yet ...to help move homes faster"

Martin L. Bartling
Chairman
N. A. H. B. Construction
Committee



suburban

Gas or Electric "Built-Ins"

In his travels over the nation as chairman of the N. A. H. B. Construction Committee, Martin L. Bartling, prominent builder from Knoxville, Tennessee, states: "I've found that no single item holds more interest among builders than built-in ranges. It's a reflection of the terrific desire on the part of home buyers for modern, convenience-level cooking. In my opinion Suburban, with all its exclusive features, is by far one of the greatest sales tools yet for helping to move homes easier and faster."

EXCLUSIVE—BEST DEAL FOR BUILDERS! Whether your public demands gas or electric, only Suburban offers you easily interchangeable color panels for oven front and surface unit trim. Your prospects may choose from stainless steel, black, white or 4 additional porcelain enamel colors. Suburban is also the only quality-built modular unit priced to sell for less than comparable gas or electric conventional ranges. Easily installed, pre-sold to millions through powerful national advertising. Same size cabinet opening will take either gas or electric ovens.

suburban

A QUALITY SAMCO PRODUCT

Dept. DD, Samuel Stamping & Enameling Co., Chattanooga, Tenn.

At no obligation to me, please send complete information on ☐ GAS

... ☐ ELECTRIC Suburban built-in ranges.

NAME _____ TITLE _____

FIRM _____

STREET _____

CITY _____ STATE _____

I'm a ☐ Builder of New Homes ☐ Kitchen Remodeler

glaziers during peak glazing seasons such as late autumn.

When one builder last fall was unable to get his homes glazed promptly, he removed the sash, carried them to a union glass shop, had glass installed there, then reinstalled the glazed sash. When prompt retaliation by the glaziers' union threatened to stop his entire production, he removed the newly installed glass panes and arranged to have the work redone by on-the-scene workmen.

Grand jury probe. It was against this sort of background that a special federal grand jury was impanelled Jan. 3 to probe possible antitrust violations in the glass industry.

Nineteen glazing firms were subpoenaed, in Chicago, and on Jan. 4 they began to file into the old US courthouse to give evidence to the jury. Earl Jenkinson, chief of the Chicago antitrust division office, predicted that it may require six months to unfold the complete story of glass union-industry abuses in the Chicago region. But he was confident that he had enough evidence to break up one of the building rackets that has helped make Chicago building costs so high.

Big name witnesses. First witness carried a 9" thick stack of records. He was Michael Shapiro Jr., president of Hamilton Glass Co., a Chicago jobbing firm. Among other firms subpoenaed to appear with their records were Libbey-Owens-Ford Glass Co., Pittsburgh Plate Glass Co., American Window Glass Co., Fourco Glass Co., and Backford Window Glass Co. The first four were defendants in a consent decree in federal district court in Toledo, Oct. 3, 1948 which restrained them from restricting sales or fixing prices.

Already pending before the Chicago district federal court is an antitrust suit against the Employing Lathers' & Employing Plasterers' Assns. of Chicago. These cases, dismissed last July in district court, were reinstated by the US Supreme Court, on the question of whether interstate commerce was involved. The plaster cases are expected to go to trial in April.

Labor to fight against right-to-work laws

Labor unions in the construction industry continued to account for a lion's share of big strikes in 1954. Over-all, fewer workers were idled by 1954 work stoppages than in any year since 1948. Over 28 million man-days were lost in 1953, according to the Labor Dept., against 22 million in 1954. The fact remained, however, that seven of the 18 big strikes last year were involved in the construction industry. Biggest: the three-month strike of 60,000 West Coast lumber workers.

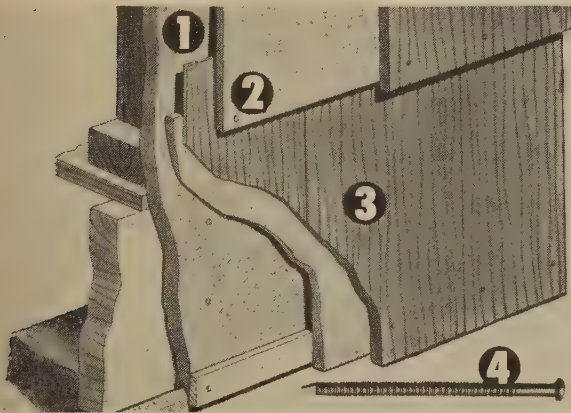
The outlook for this year: a concentrated effort by all unions to win more benefits, including special pressure on state legislatures to repeal right-to-work laws. For building, the probabilities are that this means even

(continued on p. 70)

\$136 on homes like

says George DeVries, DeVries Construction Co., Inc., Lexington, Mass.

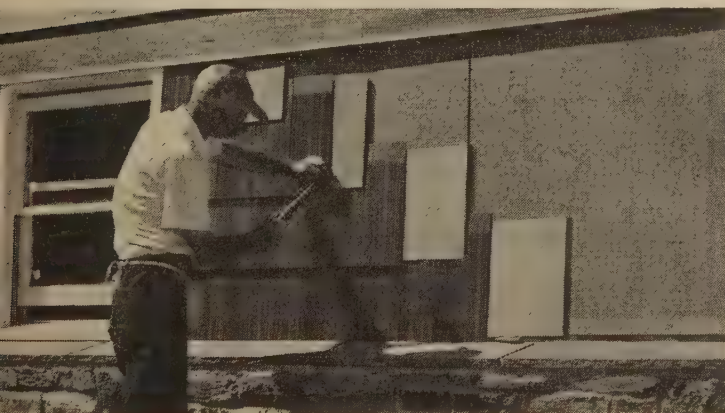
DeVries Construction Co. stands to save a whopping \$30,600 on their 225-home, 200-acre Sun Valley development with Insulite's approved Shingle-Backer System. And while this Bildrite and Shingle-Backer combination is an effective cost-cutter, it also helps build better homes—more bracing strength, greater insulation value, tighter sidewalls and deep, modern shadow-line beauty. That's the nice thing about Bildrite and Shingle-Backer—they help you build better homes *while they cut your costs*. Pictures on these pages show how.



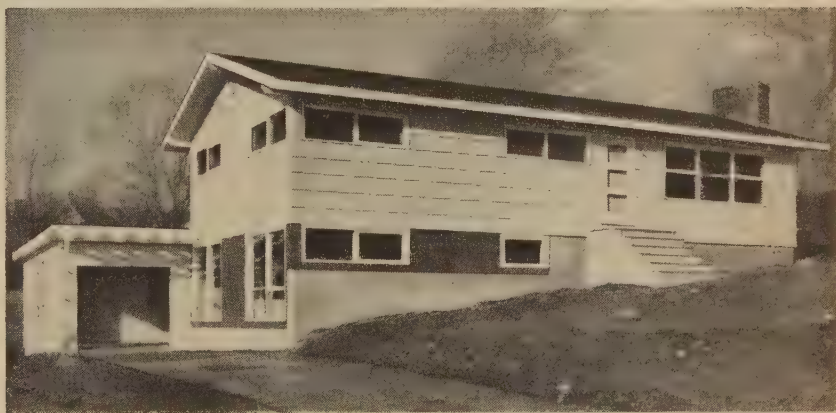
Builds a tighter, stronger wall. Developed by Insulite, this combination makes a strong, tight exterior wall with more than twice the insulation value of wood sheathing, felt and double-course wood shingles combined: (1) Bildrite Sheathing (2) Shingle-Backer (3) Outer-course Shingles (4) Grooved Nail. Withstands 250 M.P.H. winds.



First, apply Bildrite—cut sheathing time as much as 43%. One carpenter can sheath 1,000 sq. ft. in 8 hours or less. 4' Bildrite has more than twice the bracing strength of horizontal wood sheathing, thus eliminates need for corner-bracing. No building paper required since Bildrite is waterproofed throughout with asphalt.



Next, apply Shingle-Backer in half the time required for wood under-course shingles. Handy 4' panel produces deep, modern shadow-line. Practically eliminates waste. Adds extra insulation value to sidewall. Can be used or stored anywhere in any weather—it's waterproofed throughout with asphalt.



Bildrite and Shingle-Backer help save an average of \$136 on Sun Valley homes like this. See how Insulite's approved Shingle-Backer System can help you build better for less on your next job. Free cost-comparison forms and illustrated product data show how. Write Insulite, Minneapolis 2, Minnesota.



INSULITE DIVISION, Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota

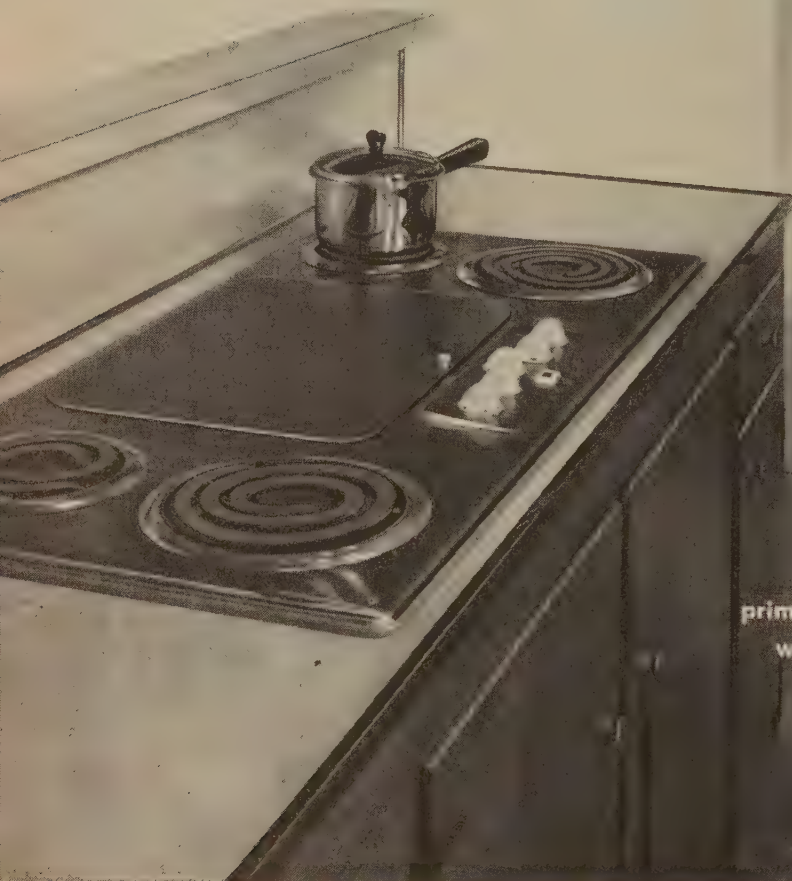
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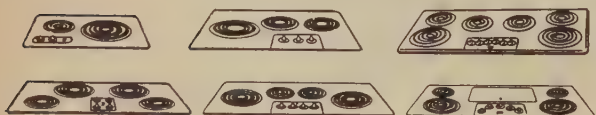
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NEWS

(continued from p. 66)

more work stoppages in 1955. Building faces a boom year. Good business means hot labor negotiations.

The CIO, in its recent convention, expected at least a 1½% increase in total production of goods and services this year. The implication: the CIO will be out for more money. With building apparently going into its second biggest year in history, the predominant AFL contingent of the construction trades would plan similar activity for increased benefits.

Right to work. The union's No. 1 plan of action was going to be an all-out effort to amend right-to-work laws in 17 states and to prevent passage of such laws where they did not exist. (A total 44 state legislatures will meet this year.) The right-to-work laws, which outlaw union shops specifying union membership or no job, have spread through the South in the last few years and caught organized labor, in a manner of speaking, napping. This would be the year to fight.

Industry would be out to counter-lobby with a vengeance. Support for the laws, which will be up for consideration in at least half-a-dozen states, including California and Maryland, had already come in broadsides and editorials from the US Chamber of Commerce and the National Assn. of Manufacturers. But Secretary of Labor James Mitchell had stated in December that he was "categorically opposed" to such laws, a view that was promptly characterized by the administration as only Mitchell's personal view. The split was characteristic of the black-and-white approach to the questions. Neither NAHB nor AGC had officially made a statement on the coming battle, undoubtedly lying low to keep peace with the building trades.

Paint problems. On a more local level, painters—who in the latter months of 1954 had been in the forefront of wage gains among unionized building trades' workers—were arguing with contractors and home-builders in Miami and Washington relative to their welfare funds. The painters' council in Washington called 11 contractors "deliberately delinquent in payment of contributions to the painters' health and welfare fund."

NRLB examiner rules prefab boycott illegal

An NLRB trial examiner in Cleveland last month ruled that AFL carpenters violated the Taft-Hartley Act by boycotting ready-made doors.

The finding set a precedent of great benefit to the prefabricated home industry. It involved a case in which Local 11 refused to handle doors produced by General Millwork Corp. and Haskelite Mfg. Corp., both of Grand Rapids, Mich. on a job in Rocky River, Cleveland suburb, where Erie Building Co. put up 150 prefabs. The doors reached the job site with frame cut, door hung and all hardware installed.

The examiner ordered the union to cease and desist.

(NEWS continued on p. 74)

Presenting....

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OF THE NAHB SHOW**

**Uni-bilt
FIREPLACE**

**The Complete Prefabricated
Fireplace and Chimney**

At last! A real wood-burning fireplace that can be installed by semi-skilled labor in 4 to 6 manhours. Completely prefabricated from hearth to chimney top, it eliminates all masonry—brings the open fireplace within the reach of even the lowest priced homes.

Approved by Underwriters' Laboratories

The Uni-bilt Fireplace has been tested and approved by Underwriters' Laboratories for zero clearance installation in or against *any* wall surface. It can be bolted direct to the studding or recessed into the wall. No foundation or floor reinforcing is required—no special tools are needed. Shipped in cartons ready to install.

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The Uni-bilt Fireplace is a full sized fireplace that requires a minimum of space within the room. Its design blends with every architectural style and the unit can be painted to harmonize with any room decoration. Satin-finish stainless steel trim and an attractive flexible screen are standard equipment with each unit.

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State.....

James Moreland



RANCH HOUSE FOR SALE (RIGHT) AT A BUSY PORTLAND INTERSECTION

BUILDERS AT WORK:

Downtown drawing card

To save prospective buyers the drive to the suburbs, Realtor **Betty Kies** of Portland, Ore. put up a three-bedroom ranch house in a vacant downtown parking lot on one of the city's main thoroughfares (see cut). She leased the land (valued at \$75,000) for a year at \$450 a month, feels the attention the house has been getting from passersby is worth the expense. More than 3,000 persons dropped in the first Sunday (just before Christmas). Since then there have been several hundred visitors a day and eight homes have been sold at \$16,000 apiece. The model is one of the more expensive of several planned for Cherry Blossom Park on the city's east side, owned by **Ted Asbahr**, past president of the Portland Home Builders Assn. Asbahr put up the 1,500 sq. ft. in-town model in two months, had little trouble except that he had to jackhammer a number of holes in the pavement for shrubs. Miss Kies sold the downtown model—which was built on heavy beams for eventual mobility—after cutting the price to \$11,000 to allow for expected removal costs of about \$4,200.

New town for California

Devon Construction Co. is starting in on its second batch of ranch-style homes in the embryonic city of La Mirada—a projected community 30 minutes from Los Angeles carved out of land originally purchased by Map-maker Andrew McNally in 1893.

Devon has already put up 540 homes, now plans two more subdivisions on La Mirada's 2,000 residential acres. The company offers a broad range of architectural styles in their nine new models, but the emphasis is on such stylings as the Kingston (see cut), a three-bedroom, two-bath house designed by Architects **Palmer & Krisel**.

Architect **David Freeman** did some of the other models, all nine of which, comprising a small parade of homes in themselves, have attracted both public and builder attention. Devon Construction executives feel that two major attractions of the homes (which will have olive tree plantings threaded between them) are their color coordina-

Joseph Alpern



LA MIRADA CONTEMPORARY

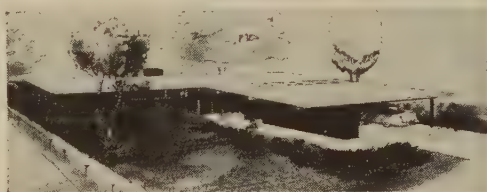
tion and custom-made electrical fixtures. Prices vary between \$14,500 and \$16,000, with nothing down for veterans in most cases.

Big deal in Denver

Two of President Eisenhower's best Western friends, **Bal F. Swan** and **Aksel Nielsen** of Denver, are involved in what looks like the city's biggest building plan in 1955—a \$100 million community project to include 6,000 brick homes on the turnpike between Denver and Boulder. Both men are officers—along with some other prominent residents—of the new Turnpike Land Co., Inc. Builder **K. C. Ensor** is listed as developer, with at least six other builders slated to start construction in the spring on the first 600 brick homes.

Cleveland contest winners

A broad-roofed, open-plan dwelling won first prize for Cleveland Architects **Donald Richards** and **Gordon Yager** in an "Ohio Home" competition sponsored by the Cleveland Home and Flower Show and the Home Builders Assn. of Greater Cleveland. The house (see cut) met



FIRST PRIZE IN CLEVELAND

contest conditions of a maximum 1,300 sq. ft. floor area on an interior lot of 75' x 150' for prospective occupancy by husband, wife and two prospective occupancy by husband, wife and two children. The home, best of more than 100 entries, will be constructed at the 1955 Greater Cleveland Home and Flower Show.

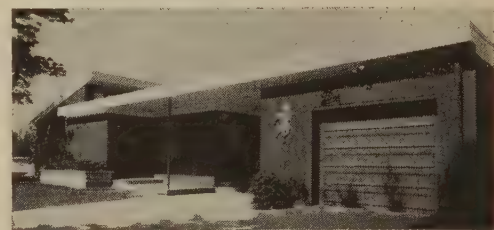
New Year's plans

The **Manilow-Klutznick** Park Forest development outside Chicago will be increased by 2,500 homes, upping the population from 25,000 to 35,000. Construction has started on the first 400 houses. Price of the new three-bedroomers will be \$17,500-19,400, slightly higher than most Park Forest homes. Reason for the rise, said Klutznick, is the demand for a bigger home for bigger families. . . . The **Portland (Ore.) Home Builders Assn.** has acquired a 95' x 100' site in the east side business district for construction of a headquarters building. **Graham Killam** heads the building committee; **Universal Plan Service** did the design. . . . A survey by the **Home Builders**

Institute in Los Angeles shows that homes in the area will have brighter kitchens this year; more color, more counter space and pull-out drawers for storage space and additional gas and electric outlets are among benefits listed

Labor of love

Avriel Shull, a banker's daughter from Indianapolis who is or was an artist, engraver, dress designer and advertising executive, decided to give speculative building a shot of art a few months ago and came up with the "Unicorn House" (see cut), a three-bedroom home of comfortable proportions (1,600 sq. ft.) and considerable originality (wrought-iron towel bars, built-in aquariums, murals, etc.). After 600 specially-invited guests had inspected the premises and recorded their enthusiasm in the guest book, Mrs. Shull put the home up for sale at \$39,000. The price seemed high and was dropped a few weeks ago to \$32,000—at which point a solid offer for purchase was made. Mrs. Shull, who personally acted as overseer on her first job, has since received offers to build two houses at \$22,000 and \$36,000 (featuring incidental use of marble as well as wall material) and orders for home designs from five Indianapolis builders in the \$18,500 range. She plans to start her own small suburban development in the spring for about \$20,000 a house.



A TOUCH OF LUXURY AND ART

Quality prefab in Texas

Dallas Builder **Leslie Hill** has loaded his **Cliff May** houses with equipment and gone after a higher-priced market in the \$14,500-16,500 bracket. Besides disposals, laundry-driers, etc., he has installed air conditioning and a built-in radio (connected to all rooms) that can be used as an intercom. Other features: where May's ceiling is furred down to 7', Hill uses birch plywood instead of dry wall for the ceiling and varnishes it to reflect light; grass cloth on kitchen walls to create the effect of screens. Hill also advertises his willingness to trade; in his first 54 sales in the Dallas tract he took seven trade-ins.

Teamwork in Milwaukee

"As I become more and more experienced as a builder, I find a tendency to slip further in my thinking toward the stereotyped, mechanical design of a 'Cape Cod-type productionist.' This, of course, is the thing to be avoided at all times. However, the very nature of the builder's problem forces him along these paths, and this is when the real value of an architect working with a builder can be appreciated in the final product."

Milwaukee Builder **Jack Schuldes** (who speaks above) and Architect **William P. Wenzler** joined forces a few months ago to boost the contemporary home in their area. Both are in their mid-twenties. Schuldes was working for a steel products firm until the day he asked Wenzler to design a colonial home for him. After consultation with the architect, Schuldes changed his mind about the style; another few days, consultation and they were in business. They have put up three homes (cut, p. 78) using post-beam-plank construction on a modular design, first installments of a 42-home subdivision in the village of Brookfield. The first model home

(continued on p. 78)

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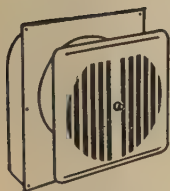
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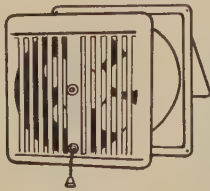
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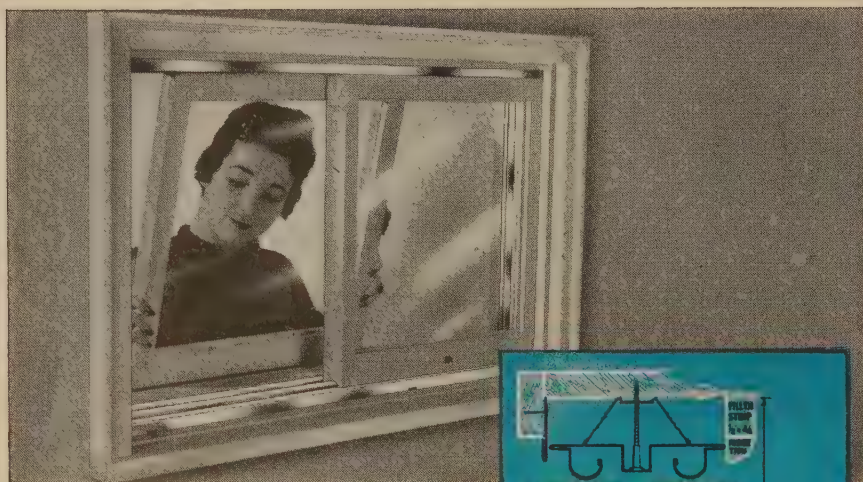
Walter G. Stackler, Pres.
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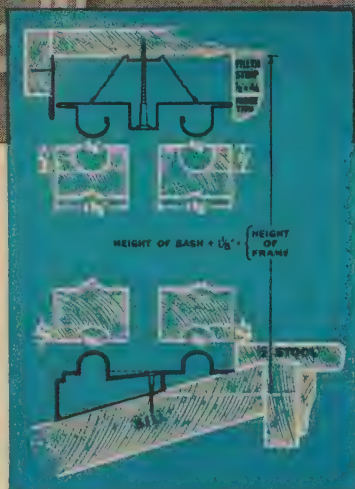


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Patent Applied for

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Ideal for shoulder high windows . . . in bathrooms, kitchens, bedrooms. Horizontal sliding windows equipped with No. 890 ALL-Glide are E-X-P-A-N-S-I-B-L-E. They can be easily stacked.

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More \$20,000 prefabs

Mel Armbrust, head of Ray-Mel Homes in Columbus, Ohio, is putting steam into his young prefab company by moving into the higher-priced bracket. Average price of his houses: \$20,000. Ray-Mel, in business a year, thus follows an industry trend already established by prefabbers like Don Scholz, Techbuilt and National Homes. (H&H, Dec. '54). The company is up to a time schedule of a house in two-and-a-half days, can push it to one day if they want. Their practice is to take any set of blueprints that a customer brings in and build the frame to specifications as speedily as possible.

"The system is right, it's quick and it's effective," says Armbrust. "And that makes the entire house cheaper. The contractors can sell houses for about 10% less than if the house were built at the lot."

\$7,000 home in Lubbock

What this country needs, in the opinion of many, is a good \$7,000 house. A recent contender for the title comes from Architect Ridjell Lee in Lubbock Texas who, with Associate E. Paul King, worked out 960 sq. ft. of floor space for \$7,000. Lee worked with Developer Ray Pace and the E & R Construction Co. to give low-income families three bedrooms in "a plan that was livable and a design they would be proud to own." The rectangular result is no mansion, but for the price and space offered it shows a simplicity of line not always found in more expensive houses. Lee reports he followed HOUSE & HOME's "Good Design for Production" system (Sept. '54), then worked with his subcontractors for cost-cutting integration all along the line. A minimum of cutting and fitting enables him to put the houses up at a one-a-day rate. Sales record: 106 homes sold the first four days, with 30 orders on the waiting list for the next project.



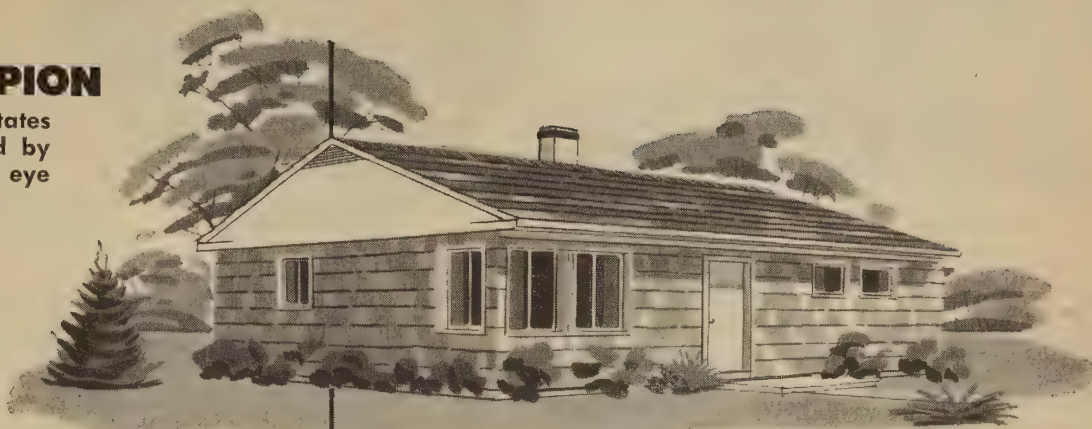
New York award winner

Simeon Heller, past president of the New York Society of Architects, won the top award in the residence division of the Queens (N. Y.) Chamber of Commerce annual building awards competition for 1954. His house, which he built for himself, is raised 6' above street level to secure garage space and a finished basement room and is set on a 60' x 100' plot. High windows in the bedroom gain privacy on the street side of the house; living room windows face gardens in the rear.

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Glamorous WESTERNER

features such sales-boosting extras as built-in bookcases, desk, and vanity. Third bedroom is a dual-purpose den/sleeping room.

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OPINIONS

In recent weeks, the nation's press has delivered itself of the following judgments on housing matters:

FHA INVESTIGATION

▶ "At one point in the Senate banking committee's report on the government housing scandals occurs a remark to this effect: If these housing projects can't be handled without creating 'unconscionable profits' for private builders then the government better build the projects itself. The report hastens to say it doesn't actually advocate this course. It is just as well. For it would be like saying the way to cure a hangover is to get drunk, since the government's involvement even on a partial basis was the root of the housing troubles. . . . There is a . . . basic way in which the government is the root of the difficulty. . . . The money the government risks is tax money and if it goes down the drain there will always be more, from more taxes or the printing press. The temptation to irresponsibility is therefore all but unlimited. It will always be so, no matter how careful the policing, so long as the government intrudes into the province of private business."—*The Wall Street Journal*.

▶ "In the absence of any interest by the FHA in keeping mortgages to a minimum, so that repayment would be more certain, builders were tempted to pad their costs. When the loan exceeded even these padded expenses, the excess was often siphoned off as a 'wind-fall.' The mortgage banker had no incentive to care, and no occasion to express himself if he did, since the loan was guaranteed (sic) by FHA. FHA officials knew what was going on, but they had no financial stake; it was taxpayers' money. . . . The whole affair is a warning that, in the present imperfect state of mankind, honesty in business affairs is best assured by the presence of somebody with a financial interest in protecting himself against cheaters."—*Chicago Daily News*.

▶ "The taxpayer and apartment house renter have to pay for the faults of that program. Dishonest officials and builders took advantage of it. But Congress wrote it. The blame could be spread a little more evenly than the Senate banking committee wished to do. . . ." *St. Louis Post-Dispatch*.

LABOR RACKETEERS

▶ "The most satisfying part of the Dale and Batman labor racketeering convictions (H&H, Jan. '55, News) is that the St. Louis area at long last seems destined soon to become purged of its reputation for building industry shakedowns. No one can estimate the sums added to the cost, or the new construction lost to the area because contractors and investors feared to take on projects. But certainly they have been great."—*St. Louis Globe-Democrat*.

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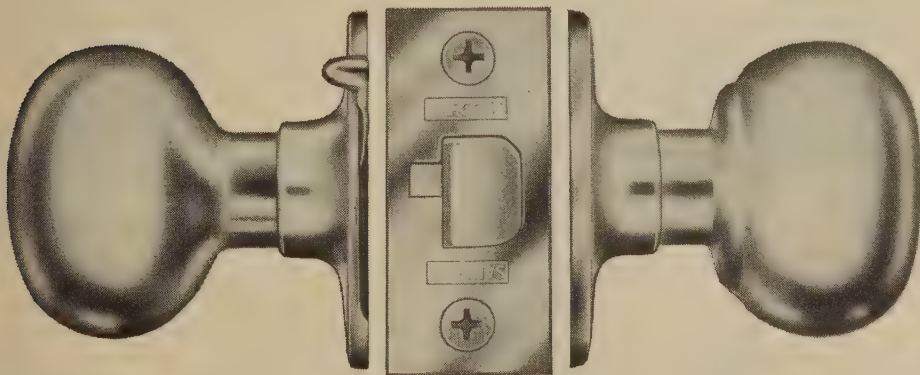
So let your prospects see the famous Sargent name wherever they go around the house. It keeps *reminding* them of quality.

Customers get the "feel" of quality in AlignaLock. Quality that thousands of builders like yourself have enthusiastically acclaimed by purchasing hundreds of thousands of AlignaLocks. Quality that Sargent *unqualifiedly guarantees for the life of the house.*

There's a real, proven sales aid for you . . . the Sargent AlignaLock Guarantee! Make it work for you, by using the AlignaLock Home-Selling Aids that come to you free with your AlignaLocks.

Here's the help you get . . . (A) copies of the Guarantee itself, to hang on the most used locks . . . (B) signs saying, "AlignaLock—the Sign of a Well Built House. Guaranteed by Sargent of New Haven," for window sills and other convenient spots . . . and (C) colorful folders, which *also* sell the Guarantee, in addition to pointing out the AlignaLock features. Leave *these* where they can be picked up by your prospects.

Put sell in every room . . . with AlignaLocks . . . and AlignaLock sales aids. See your supplier today.



Beautiful AlignaLock...High Quality at Low Cost!

Here's the lock that's causing all the excitement among builders. AlignaLock! Available for every household function . . . in a variety of beautiful finishes. All interior parts are either machined or wrought steel. One-piece knob, graceful and big. 5-pin tumbler protection. Self-aligning assembly. Quickly installed, even by unskilled help. Order AlignaLocks today from your supplier. Or write direct to Sargent & Co., New Haven 9, Conn., Dept. 11B.



SARGENT LOCKS

...the Sign of a Well Built House

the eyes buy...

sell the preferred Visible Feature!

WASTE KING PULVERATOR
AMERICA'S FINEST GARBAGE DISPOSER



WASTE KING, like this young home buyer, is a strong influence in the sale and rental of homes and apartments. Homemakers LOOK for this modern convenience that saves time, saves steps, saves work—that eliminates garbage electrically.

Sell quicker, rent quicker. Show buyers WASTE KING Pulverator. It's the lowest budget, highest quality feature that upgrades the value of the home or apartment.

SUPERIOR WASTE KING FEATURES

SUPER "HUSH-CUSHIONS"—an exclusive WASTE KING feature. Noise and vibration absorbed at sink connector and drain outlet.

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SELL UP THE
PREFERRED VISIBLE FEATURE



Over 500,000
in Daily Use!



A Product by GIVEN Mfg. Co., Los Angeles 58, Calif., Largest Producer of Garbage Disposers in America!

EVENTS

St. Louis Bilders Home Show, Feb. 12-20, St. Louis Arena, St. Louis.

American Institute of Architects, seventh annual program of national honor awards for buildings completed since Jan. 1, 1950. Entry slip and \$10 fee must be received by the Committee on Honor Awards, AIA, 1735 New York Ave. N. W., Washington 6, D. C. no later than **Feb. 15, 1955**. Submissions due on or before **April 1**. Ring binder, supplied by the committee on receipt of entry slip and fee, to be used for display of photographs and description, in place of pressed fiber-board panels used previously. Premiated designs to be exhibited at annual AIA convention, **June 21-24**, Hotel Radisson, Minneapolis. Competition open to all practicing US architects, regardless of AIA membership.

Wisconsin Savings & Loan League, midyear conference, **Feb. 18-19**, Hotel Plankinton, Milwaukee.

Savings & Loan League of Indiana, Washington's Birthday conference (for junior executives), **Feb. 19-20**, Lincoln Hotel, Indianapolis.

Philadelphia Home Show, including a do-it-yourself section, **Feb. 14-19**, Commercial Museum, Philadelphia.

American Concrete Institute, annual convention, **Feb. 21-24**, Hotel Schroeder, Milwaukee.

National Adequate Wiring Bureau, annual convention, **Feb. 24-25**, LaSalle Hotel, Chicago.

Mortgage Bankers Assn., Midwestern mortgage conference, **Feb. 24-25**, Conrad Hilton Hotel, Chicago; Southwestern mortgage clinic, **March 28-29**, The Mayo Hotel, Tulsa; Southern mortgage clinic, **March 31-April 1**, The Dinkler-Tutwiler, Birmingham, Ala.; Eastern mortgage conference, **May 2-3**, Hotel Commodore, New York City.

American Bankers Assn., Savings & Mortgage Division, annual conference, **March 7-9**, Statler Hotel, New York City.

NERSICA, Inc. (a National Association of Maintenance, Repair & Building Improvement Contractors), annual convention and exposition, **March 13-16**, Sherman Hotel, Chicago.

Prefabricated Home Manufacturers' Institute, spring meeting, **March 26-30**, on board *Queen of Bermuda*, en route to Bermuda.

American Institute of Planners, annual meeting, **March 30-April 2**, Muehlebach Hotel, Kansas City, Mo.

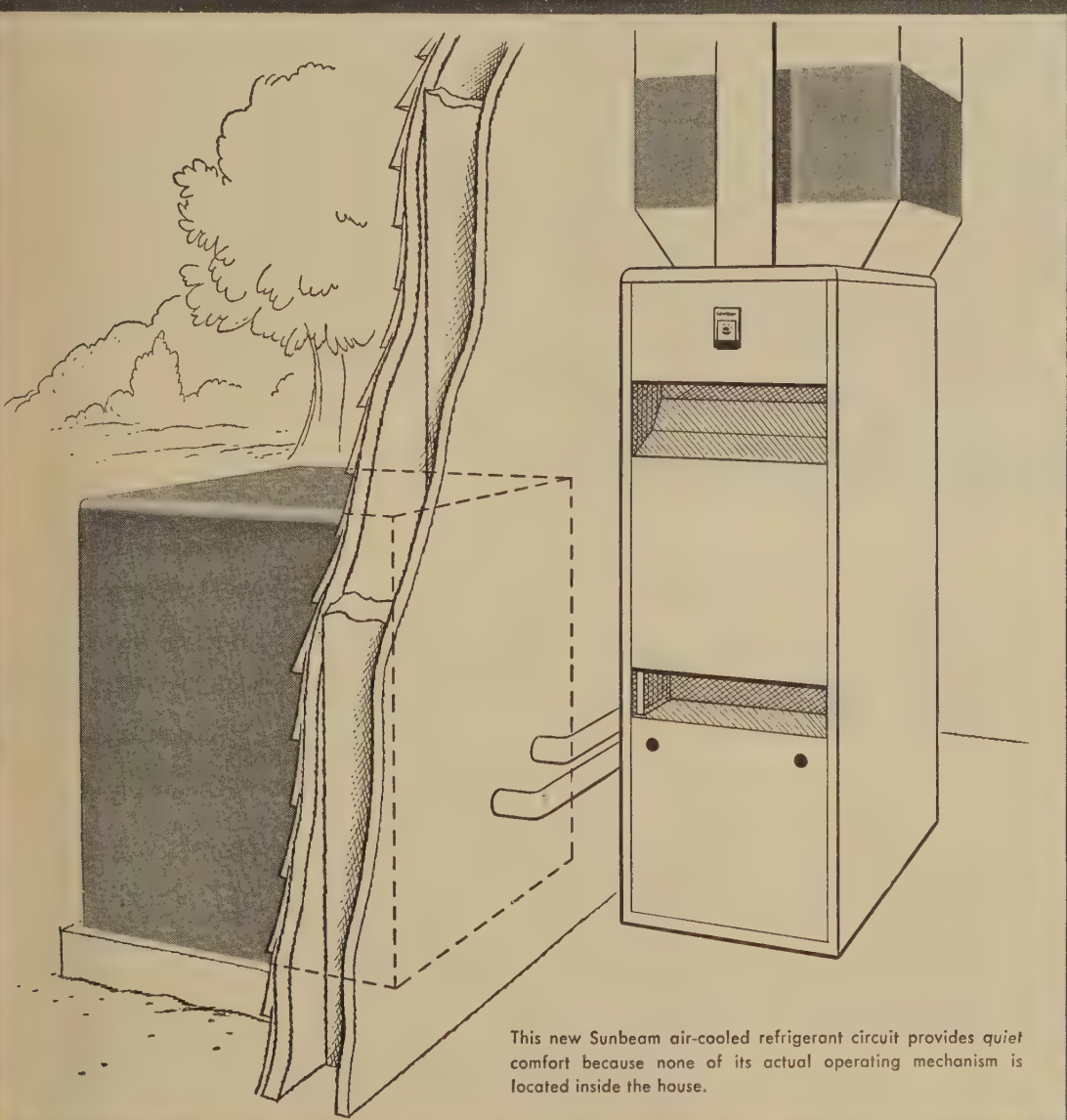
Southern Pine Association, annual convention, and exposition, **April 4-6**, New Orleans.

IT'S ALL-NEW

IT'S AIR-COOLED

IT'S SUNBEAM

Summer Air Conditioner



This new Sunbeam air-cooled refrigerant circuit provides quiet comfort because none of its actual operating mechanism is located inside the house.

With Remote
Compressor-Condenser
System

- REQUIRES NO WATER
- USES NO FLOOR SPACE

If water restrictions or high water rates have kept you from offering summer **cooling** along with winter air conditioning, here's the answer to your problem. The all-new Sunbeam remote compressor-condenser system uses no water whatsoever—just electricity and air. Easily and quickly installed **outside** the house, it requires no costly plumbing. With a few simple connections it ties right in with the new or existing winter air conditioner. As shown here, the evaporator coil fits snugly in the ductwork of the warm air distribution system, conserving indoor floor space.

Available in 2 and 3 hp capacity, this equipment pays tremendous dividends in relation to its moderate cost. To the homeowner it means complete year 'round comfort with low operating and maintenance costs, and higher resale value built into the property. For full details, contact your nearest Sunbeam distributor. **Sunbeam Air Conditioner Division, Elyria, Ohio.**

CHOOSE FROM SUNBEAM'S COMPLETE LINE—
HEATING . . . COOLING . . . AIR FILTERING UNITS



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"COOL SLEEPING" APPEAL PUSHES HOUSE SALES FOR BUILDERS BUXBAUM & WARANCH!

Mr. Buxbaum says:

"Customers today look for the items in a house which will add to their comfort. That's why each of the 120 homes in our subdivision includes an R & M attic fan for 'whole-house cooling' at no additional cost. Our advertising slogan, 'No sleepless nights at Roosevelt Estates,' has been quite successful."

Julius Buxbaum, Partner
Roosevelt Estates
Norfolk 5, Virginia



Just as Mr. Buxbaum says, people today put comfort first. For example, many now consider coolness in summer just as important as heat in winter! Imagine, then, how impressed your prospects will be with this *complete home cooling*! You can promise cool sleeping, cool living. Because an R & M Attic Fan *cools every room in the house!* It forces out pent-up heat, pulls in cool, fresh outside air. Here's the ideal *built-in* sales talk. It sounds expensive, yet it sells—complete with automatic ceiling shutter—for as little as \$137.60*!

Include this sales appeal in your "package." You'll get selling benefits far beyond its low cost! The smallest unit requires only 18" of attic clearance; the largest only 22". Fits narrow hallways. Quiet and long lasting. Fan and motor have factory-lubricated, sealed ball bearings. Fan guaranteed 5 years; motor and shutter, 1 year. Certified air deliveries are 5,000 and 7,000 CFM. 10,500 and 16,000 CFM sizes also available. Send the coupon for our informative guide to comfort cooling!

EASY TO INSTALL—1-2-3!



1 Fan and shutter arrive set up. Simply place fan over framed ceiling opening. Rubber cushion makes it self-sealing!



2 Complete automatic shutter unit screws to ceiling opening frame; flange forms trim. No finishing needed.



3 Ready-made attic louvers can be installed quickly by one man. Sizes for each of various-sized fans.

ROBBINS & MYERS

"Package" attic fans 

*Prices subject to change without notice.

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Please send your booklet, "R & M Comfort Cooling and Ventilating," A.I.A. File No. 30-D-1.

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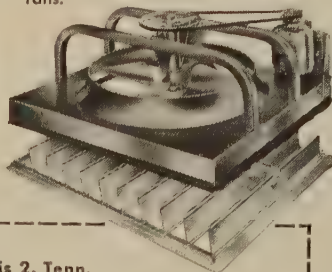
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IT'S FREE!



LETTERS continued from p. 94

not, however, supply heating, plumbing or electrical wiring or fixtures. Our package does include such items as a breakfast nook, complete kitchen cabinets, an air-conditioning system, as well as a garbage disposal unit and a dishwasher.

C. T. WILSON, president
Wilson Homes, Inc.

TO SLEEP BETTER

Sirs:

You are doing a great service for the builders of America. If each one of them would read and heed the November issue, consumers would be much better off and most builders would sleep better.

We are trying very hard to follow the quality house idea and also give more space and put extra items in the house such as fireplaces, built-in ovens and ranges, disposals, etc. Please keep up the good work.

JACK SARGENT, vice president
Sargent Builders, Inc.
Topeka, Kans.

AGREED

Sirs:

I have just read "Are you getting ready for the coming boom in quality housing?" (H&H, Nov. '54).

Yes! The American public needs better homes—they can afford them—and we are producing them.

We agree with you, too, that the problem of supplying homes to minority groups is a vexing one. However, isn't it true that most members of these groups are perfectly happy to own used cars?

GEORGE NIXON, past president
NAIIB
Chicago

MEMBERS, NOT DEPOSITORS

Sirs:

In your October issue (p. 47), you write about "deposits" in savings and loan leagues, as well as "interest" and "depositors." S&S's do not take deposits—they accept investments in their capital. They do not have depositors—they have members. They do not pay interest—they pay dividends. It is important that proper terminology be used, as it is not in the public interest to have people thinking that S&L's are banks, or the same as banks.

F. R. STEYERT, president
South Orange Trust Co.
South Orange, N. J.

● Reader Steyert is technically correct, but S&L officials themselves usually refer to their investors as "depositors." Said President Howard Edgerton "By 1960, we'll be handling 50% of the nation's home loans, and we'll have 25 million depositors or mortgage holders . . . The banks have got so worried about the growth of savings and loan associations that they spend more time figuring out ways trying to obstruct us than they do figuring out how to compete."—ED.

February, 1955

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37 NEWS—REPORT OF THE NAHB CONVENTION

86 EVENTS

94 LETTERS

112 DOES MODERN HAVE TO MEAN PLAIN?

Modern architects, reacting against austere surfaces, introduce texture and fun in materials and surfaces, at no price premium.

120 BUILDERS SELL 1,500 HOUSES A YEAR WITHOUT FHA OR VA

Ray Cherry and John Hadley prove that conventional financing can compete with government loans for low-cost houses.

126 DECORATION SOFTENS A GEOMETRIC HOUSE

Architect John MacL. Johansen patterns outside walls of a small Greenwich, Conn. house with tiles; uses patterns of nature seen through glass to enrich the inside.

130 NEWS

132 AIA PRIZE-WINNING HOUSE

Architects Smith & Williams' custom house at Pasadena uses materials interestingly, is remarkably inexpensive.

134 WHY PAY YOUR ARCHITECT MORE?

Rochester, N. Y.'s Jablonski Homes, Inc. finds that Architect John Highland's \$100-per-house fee saves money and earns money.

140 TWENTY PER CENT COOLER WITHOUT AIR CONDITIONING

Architect Richard A. Kuhlman designs a self-cooling house for Yukon, Okla. that should influence the design of next summer's merchant-built houses.

144 IS THE SPLIT LEVEL HERE TO STAY?

A survey of the state of this boom house indicates that it is the best 1,600 sq. ft. house for a small lot.

156 TWO-STORY HOUSE DIGS INTO THE GROUND

Builder Cyril Farny of Morris Plains, N. J. takes a leaf out of Carl Koch's Techbuilt idea and comes up with a house better planned than most split levels.

160 LUMBER DEALER SELLS HIS ARCHITECT

Charles Wagner, president of Indiana's biggest lumber firm, meets prefab package competition by selling his dealers the services of Architect Fran E. Schroeder.

164 THREE EXPERIMENTS IN ONE HOUSE

In his own house, Architect Kenneth Kassler of Princeton, N. J. tests ideas of space, construction and materials.

170 NEW PRODUCTS

226 TECHNICAL PUBLICATIONS

238 REVIEWS

252 RESEARCH



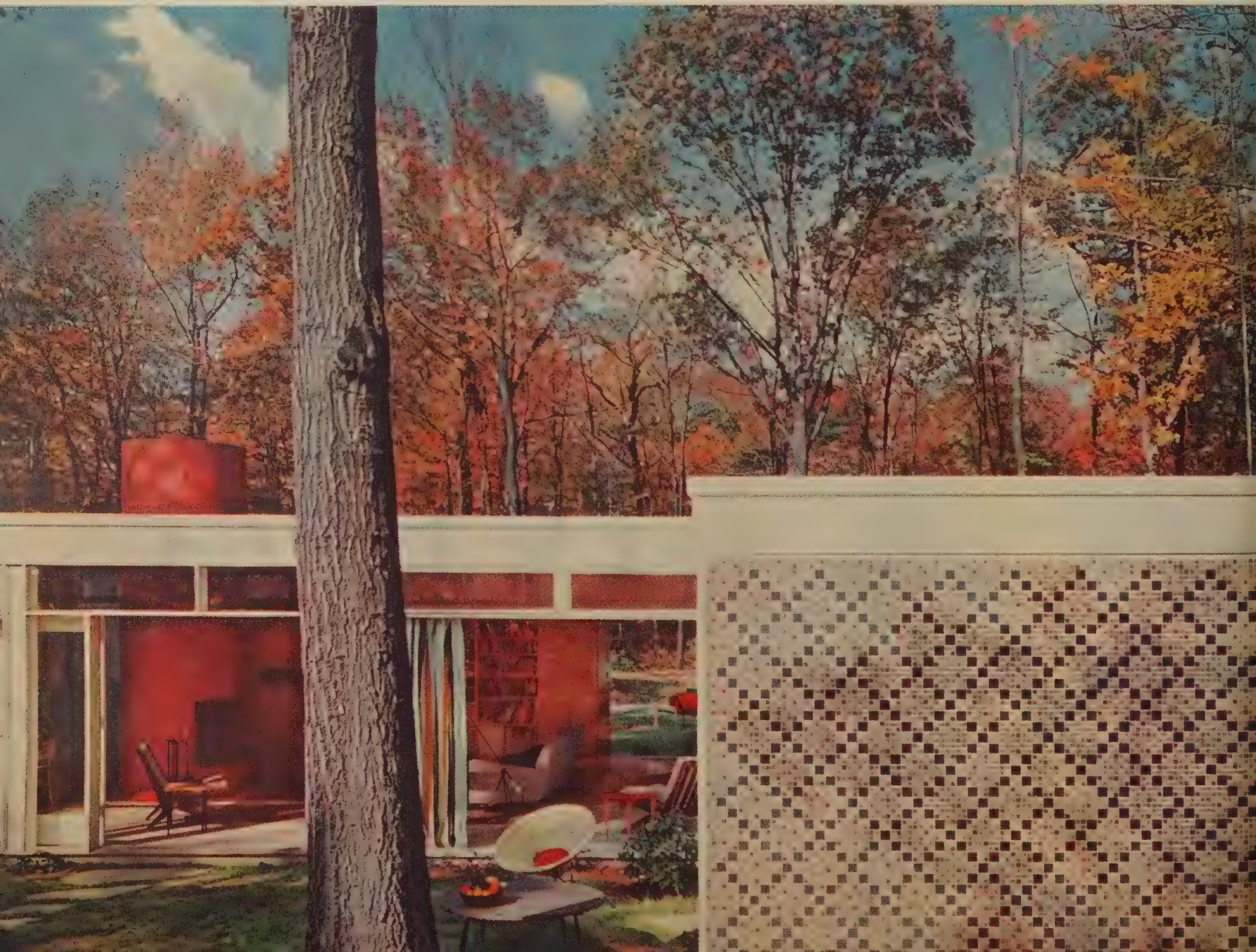


Does modern have to mean plain?

Answer: absolutely not

Photos: Ben Schnall; color courtesy Tile Council of America

And this new, tile-faced house by Architect John Johansen is a nice argument in favor of more decoration—in the right place and of the right kind. (For more details on this house, turn to p. 126).

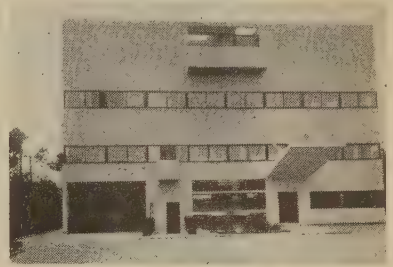


There was a very good reason for plain walls in the 1920s

Reacting against this type of frilly nonsense
—demonstrated here in a Newport, R. I., villa of 1874—



—pioneers like Le Corbusier built their stark and plain-walled houses of the 1920s



But ten years later, even Le Corbusier had had enough of plainness

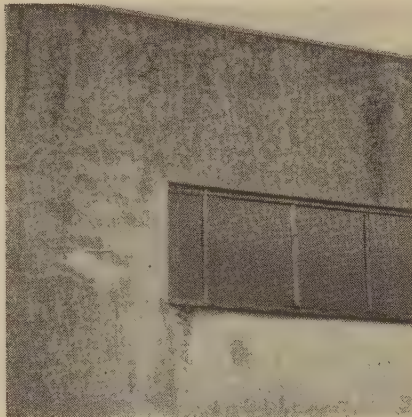
He used stone like a big mosaic
in this handsome house he built in France, in 1937



Leading modernists have been steering away from excessive plainness ever since

*Photos: Wayne Andrews; Museum of
Modern Art; F. Scherschel—LIFE*

One incidental reason
modern architects changed their minds
about plain walls
was that the plain walls did not stay very plain
This plain wall is only 25 years old
—yet it looks about ready to crumble.



This patterned stone wall, on the other hand, is 700 years old
—a monument to Inca craftsmanship.



The lesson was not lost upon modern architects

And today, after the initial reaction against Victorian frills, it is time to relax, to experiment, and to have some fun

One way to have fun is to enrich your houses with more textures, more patterns,
more applied decoration.

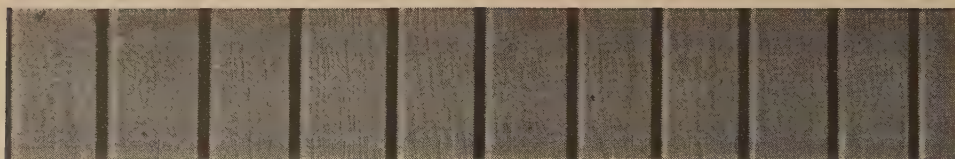
But remember this: do not use decoration like a kind of sauce, poured indis-
criminate over everything in sight. That will defeat your own purpose.

Because textures are more effective next to smooth surfaces; patterns stand out
more handsomely next to plain walls; and decoration is a lot more decorative
when applied in a few places only, with plenty of undecorated space in between.

Having fun does not necessarily cost any more. On the contrary—

a smooth surface calls for more expensive workmanship, more expensive main-
tenance. Cheap materials can be used cheaply to make rich-looking patterns. **For the evidence, please turn the page**

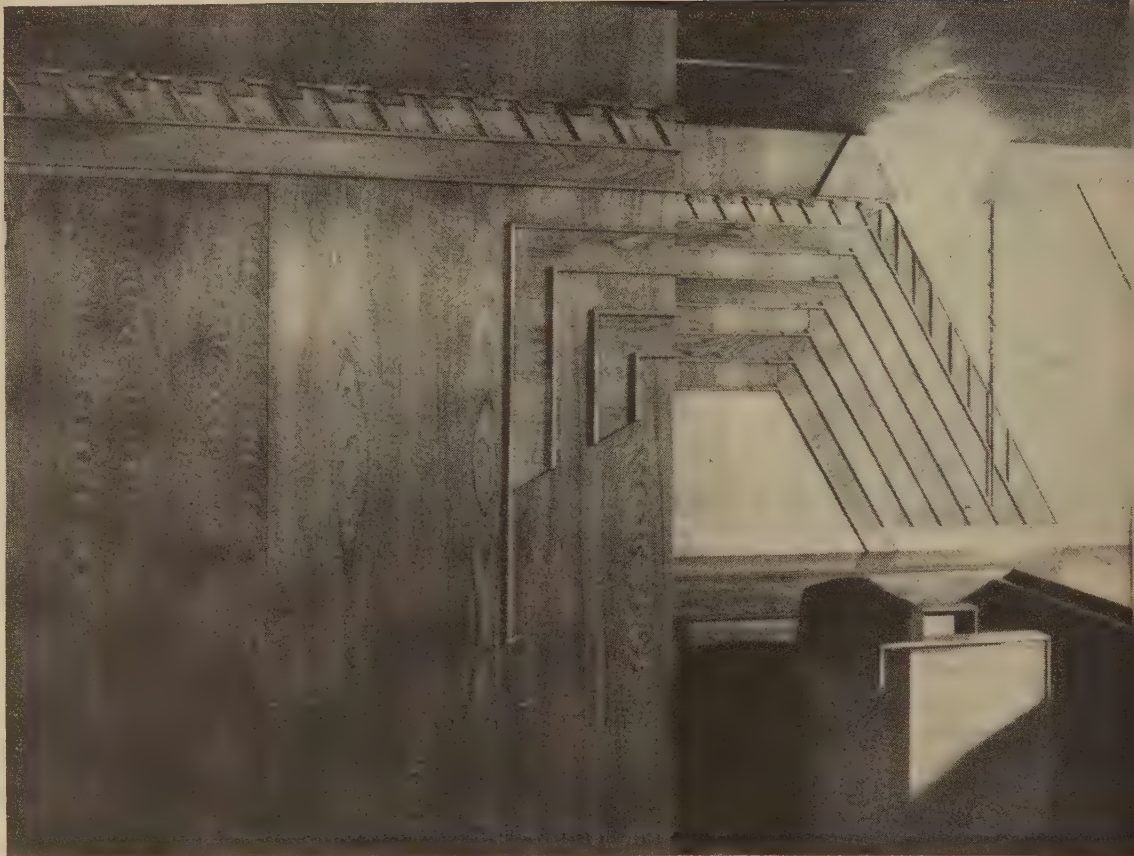
15



16



17



15. Regularly grooved fir plywood.

Photo: Richards Studio (Douglas Fir Plywood Assn.).

16. Striated redwood boards, with T-shaped battens used to emphasize horizontal joints.

Smith & Williams, architects. Photo: Julius Shulman.

17. Abstract wood mural.

Frank Lloyd Wright, architect. Photo: courtesy Museum of Modern Art.

18. Cypress blocks used for floor of screened patio.

Twitchell & Rudolph, architects. Photo: ©Ezra Stoller.

Traditional materials make modern patterns

19



19. Limestone laid in random ashlar courses.

Frank Lloyd Wright, architect. Photo: ©Ezra Stoller.

20. Local rock, cut into rectangular blocks.

Edward L. Barnes, architect, Mary Callery, sculptress. Photo: Ulric Meisel.

21. Multicolored marble laid in ashlar courses.

Frank Lloyd Wright, architect. Photo: P. E. Guerrero.

22. Local fieldstone used in a retaining wall,

Marcel Breuer, architect. Photo: Ben Schnall.

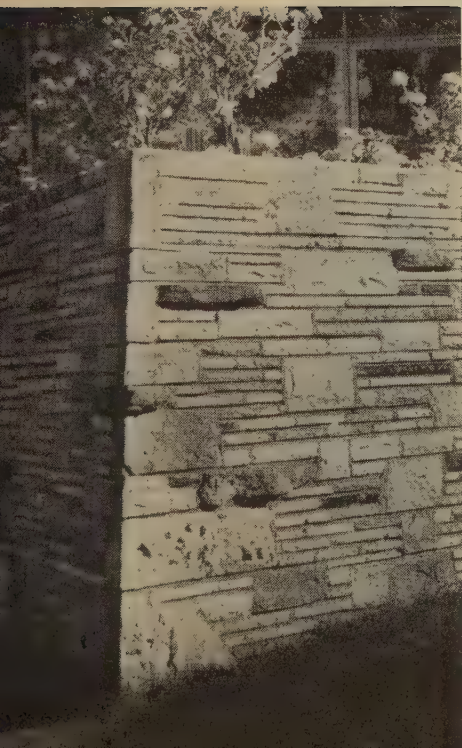


20



Wood

It became an entirely new material when it was bonded with plastics. Today, plywood is available with its own, integral patterns and textures. Result: no visible surface irregularities, no visible joints. Even wood in its natural state has been used in unorthodox, decorative ways: e.g. in abstract murals, in log floors, in striated redwood boards (with joints accented by horizontal, T-shaped battens).



Stone

Used in irregular courses, stone can create handsome, rough patterns and wall textures to soften geometric structures. Many different effects are possible: Frank Lloyd Wright often uses very long, very thin courses of stone to accent horizontality in his buildings. Others use mosaic-like stone patterns reminiscent of Pennsylvania Dutch farmhouses. Still others like almost regular, ashlar patterns. Stone from local quarries is often much less expensive than most people think: in some areas cut granite and even marble can be bought at reasonably low prices.

23

Applied patterns **should be used with restraint**

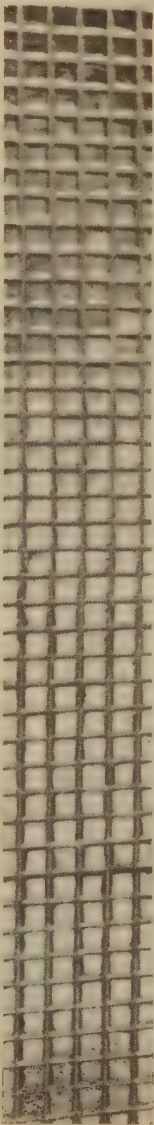
Decorative wallpapers and tile mosaics used to be anathema to modern architects. Today, however, with handsome, abstract patterns available in both media, these applied surfaces are coming back. Caution: in a modern house, walls and partitions tend to be treated as free-standing, slab-like units that direct the *flow* of space. Walls are not meant to wrap around little cubicles. This means that a wallpaper should be applied to a single slab-like surface—not carried around a corner or over onto a ceiling. Each surface in a modern house needs to be clearly differentiated from the next. To cover all with a uniform pattern would turn open spaces into tight little rooms.

- 23. Mosaic tile pattern on a fireplace wall.
Photo: Lionel Freedman, courtesy The Mosaic Tile Co.
- 24. Abstract tile mural.
Photo: George de Cennaro, courtesy The Mosaic Tile Co.
- 25. Play of light on glazed tile produces many decorative variations.
Mario Ciampi, architect. Photo: Thomas Hollyman.
- 26. Wallpaper used on a single wall panel, and contrasted with plain ceiling and sheets of glass.
Twitchell & Rudolph, architects. Photo: ©Ezra Stoller.
- 27. Small-scale wallpaper patterns do not compete with other objects (and people and their possessions) in modern room.
Gropius & Breuer, architects. Photo: ©Ezra Stoller.

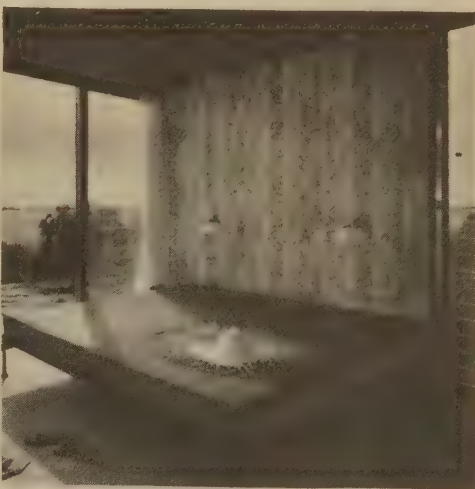
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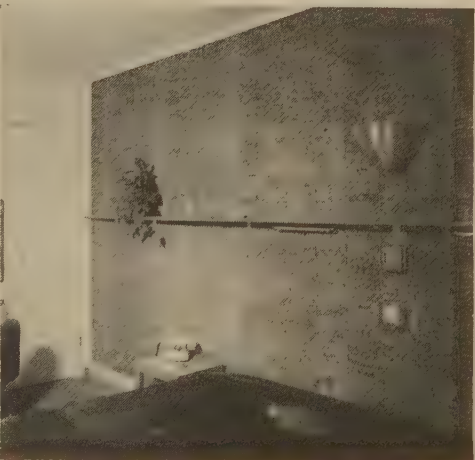
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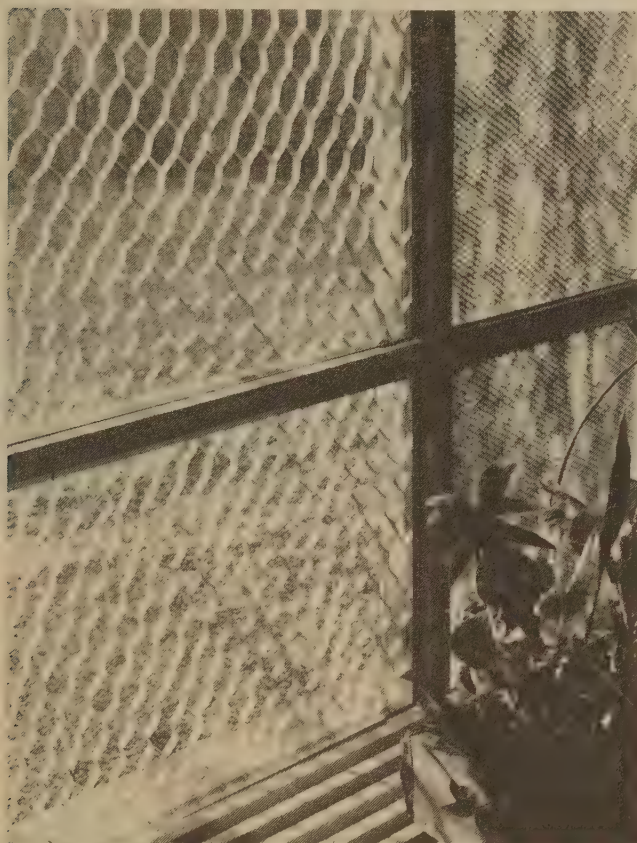
28. Plastic window sandwich with honeycomb core.
Different sizes of honeycomb create changing patterns.
Kenneth Kassler, architect. Photo: Marc Neuhuf.

29. Wooden grille acts to control sun and sky glare,
doubles as decoration.
Albert Ely Ives, architect. Photo: Morley Baer.

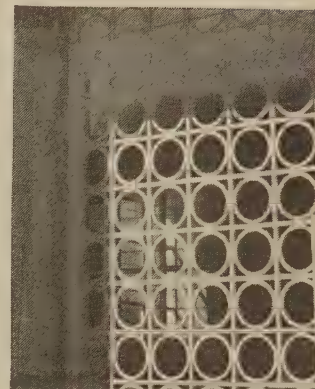
30. Wrought-iron grille in Mexico—a traditional decorative
device used in modern, geometric patterns.
Photo: H. P. Harris & T. S. Hardy.

31. Decorative grilles make patterns out of sunlight.
Campbell & Wong, architects. Photo: Morley Baer.

28



29



30

31



Grilles and screens

break up the light

Most effective "organic" decoration of all is a patterned screen, for it is not only a decorative accent in itself, but also casts everchanging patterns of sunlight on adjoining walls and floors—if it is placed where the sun can reach it. Modern uses of this device range all the way from the traditional wrought-iron grilles to a new plastic-sandwich window, invented by Architect Kenneth Kassler (see also pp. 164-169). His window has a paper honeycomb core between sheets of transparent plastic. Result: lovely light patterns inside, varying degrees of transparency depending upon the angle at which you look out, and varying degrees of privacy for the inside depending upon the angle at which anyone looks in.

For examples of modern houses using new decorative devices inside and out, turn to pp. 126, 132 and 164.



Four years ago Ray Cherry (left) and John Hadley weren't even homebuilders. Today a big idea has skyrocketed Hadley-Cherry to tenth biggest builder in California, fourteenth biggest in the nation. Here is . . .

how these two young builders can sell 1,500 houses a year without FHA or VA

Here is a success story from Los Angeles that may be an eye opener for small builders as well as big. It suggests that many things most builders, most mortgage lenders and most realtors believe, ain't necessarily so. For example—

It ain't necessarily so that conventional financing cannot compete with government-insured loans for low-cost houses.

It ain't necessarily so that people who cannot afford a big down payment cannot afford accelerated monthly payments to build up an equity fast.

It ain't necessarily so that you cannot sell houses by the hundreds unless financing is so easy (as is now the common practice in Los Angeles) that only \$1,335 has to be paid off on a \$15,000 house at the end of five years.

It ain't necessarily so that mortgages have to run 30 years.

HADLEY-CHERRY, INC., builders
ROLAND LOGAN RUSSELL, architect
STANDARD FEDERAL S & L
and CALIFORNIA FEDERAL S & L, financing
GUARANTY SALES, COVINA REALTY, sales agents

Says J. Howard Edgerton, new president of the US Savings & Loan League and one of Hadley-Cherry's bankers: "We think the kind of financing Hadley-Cherry do is the logical answer for the low-price house." Edgerton's California Federal Savings & Loan Association is now twelfth biggest in the nation.



While competing builders up and down the California coast have been trumpeting no-down payment, 30-year VA financing, Ray Cherry and John Hadley have been quietly tapping the big non-veteran market.

They have cracked it wide open by offering a tremendous value (a four-bedroom, two-bath, two-car-garage house for a rock-bottom \$9,250) and a new type of financing that enables them to undercut even the liberalized FHA down payments made possible by the new Housing Act.

This new wrinkle on conventional financing is so good for the builders that they will net almost three times as much per house as they could net after taxes with VA and FHA. It is so attractive to home buyers that they don't balk at paying 6½% interest (vs. 5% interest and insurance for FHA). They don't balk at having to pay off the mortgage in 20 years (vs. 30 years FHA). They don't balk at a big monthly payment for the first six or eight months (nearly twice as big as with FHA). They don't balk at monthly payments nearly half again as high (\$65 vs. \$47.55 for FHA).

What makes the plan so attractive is that the down payment on a \$9,250 house is only \$395 with no impounds or other closing costs. This is not much more than half the cash that would be required for the same house sold FHA, with \$250 for fees and closing costs on top of a \$500 minimum down payment.

Hadley-Cherry have found their market so big they have had no trouble selling the 1,594 houses they started last year.

Here's how the financing works:

Instead of selling their houses outright as FHA would require, they market them with a contract of sale, under which they retain ownership for 20 years (unless the buyers pay off the builders' interest ahead of time). For the tax angle that makes this so profitable, see next page.

The terms of the contract of sale let the builders get their own money out within eight months, but they leave most of their profit in to be paid off over 20 years. For example and specifically:

On the four-bedroom \$9,250 house the savings and loan association puts up \$7,350, based on a \$9,750 appraisal (\$500 more than

the selling price). This \$7,350 provides both construction money and permanent financing through a single loan. An essential feature of the plan is that amortization does not start until eight months after the house is completed and sold.

Hadley-Cherry pay 4% for this financing, believe 30-year FHA money would cost them twice as much in fees and discounts.

The buyer pays a delivery price of \$395 and for the first eight months pays \$85 a month, \$35 as rent (which covers interest on the mortgage money) plus \$50 to be applied to build up his equity to a total of \$795 by the end of eight months.

This \$795 equity plus the \$7,350 mortgage cover all but \$1,105 of the sales price. This \$1,105 is a little less than the builders' profit per house, which is another way of saying that at the end of eight months H-C have everything out of their house except the bulk of their profit.

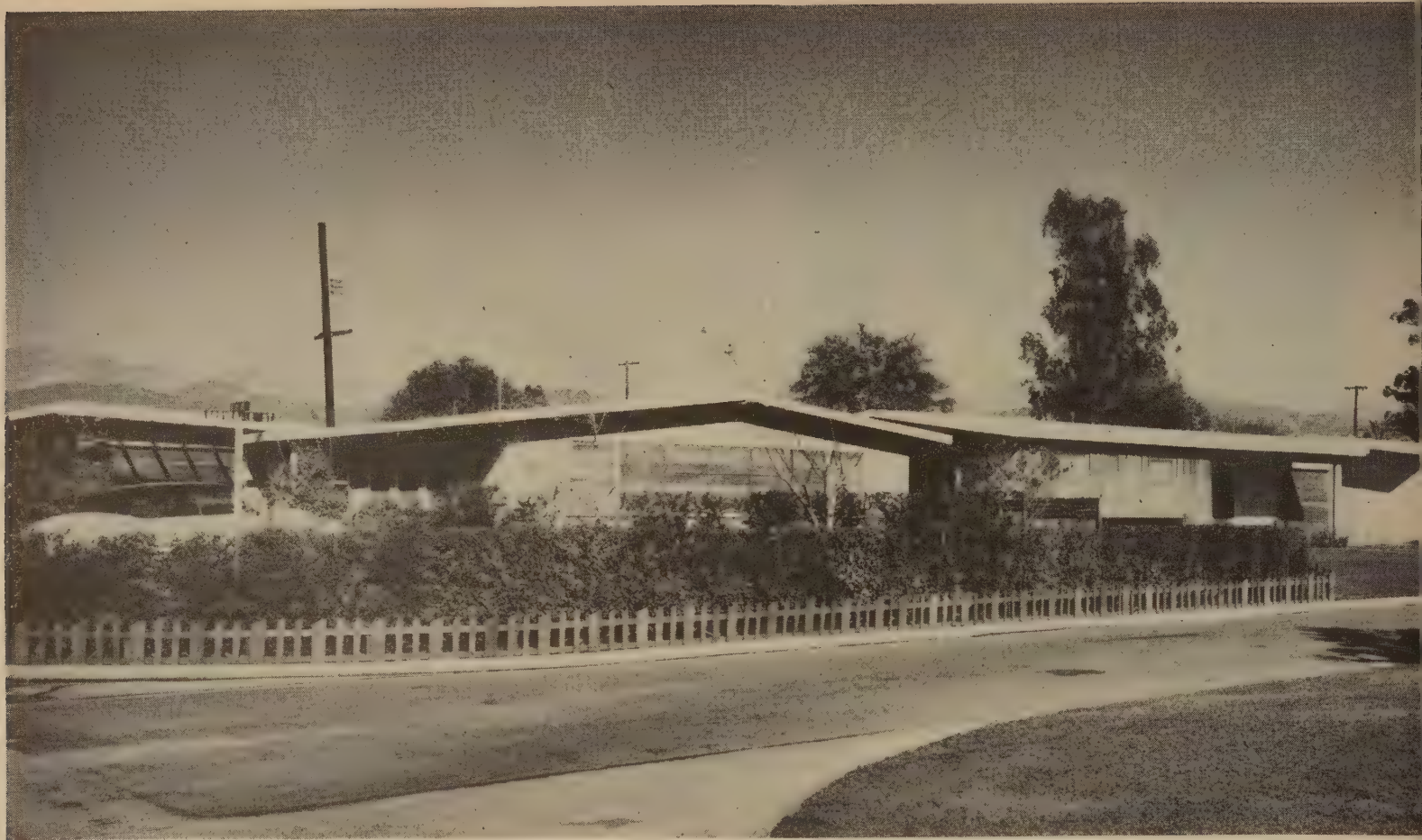
After the first eight months, the buyer pays \$65 a month, which is enough to amortize the unpaid balance at 6½% interest over 20 years. The mortgage interest is 6%, so this allows H-C half of ½% for making the monthly collections for the lender and staying on the note.

H-C retain ownership of the house

They can evict a delinquent occupant in two months at minimum cost, as compared with six to 12 months and \$200 foreclosure cost if they had sold the house. In practice, they have had practically no delinquency problem, partly because their buyers have a substantial equity.

The H-C arrangement involves minimum red tape for builder and customer, no transfer costs or title searches (since title does not pass), no FHA approvals. It lets the builder out of FHA requirements in excess of local codes, including greater kitchen cupboard space (but H-C's natural birch cabinets are one of their biggest sales plugs), street planting (but H-C save trees on their site) sidewalks and a hotly debated type of slab construction.

Other builders are now using this type of financing, including former NAHB President Fritz Burns on nearly a third of his Westchester houses and Ed Kriste on 500 houses near Hadley-Cherry.

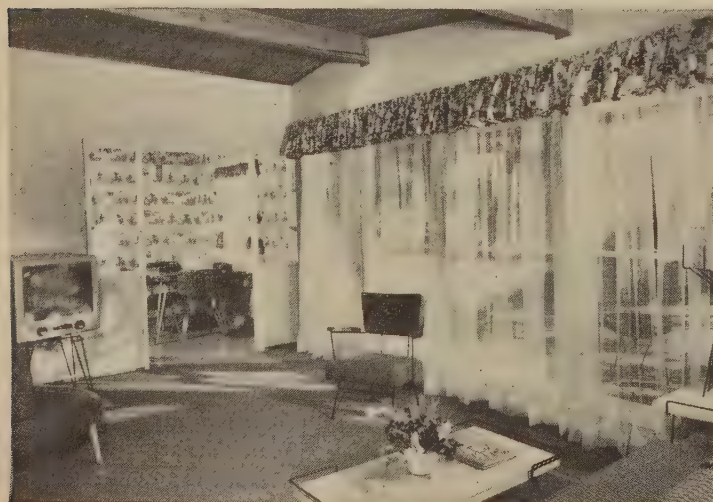


Fast pace was set a year ago by Hadley-Cherry's fast-selling Valinda Park, a 274 house development. Three-bedroom houses sold for \$7,850 at move-in charge of \$295, monthly payments as low as \$57. The builders' biggest trade secret: daily cost control.



Three-bedroom bargain is

Double-hung windows in tandem run almost to floor to form economical window wall (below). Architect neatly lined up heads with door, made door rail line up with window rail. Builders find double-hungs sell women ("easy to curtain"), think these are most economical, satisfactory window on market. Ceilings throughout are beveled-edge planks over 6"x14" exposed beams. Note handsome brick patio (left).





Photos: Julius Shulman



All display houses are landscaped, furnished with "upholstered or wrought-iron modern pieces," rattan, maple, 18th Century: "furnished model is single most important merchandising item; we will furnish 12 houses in new tract."

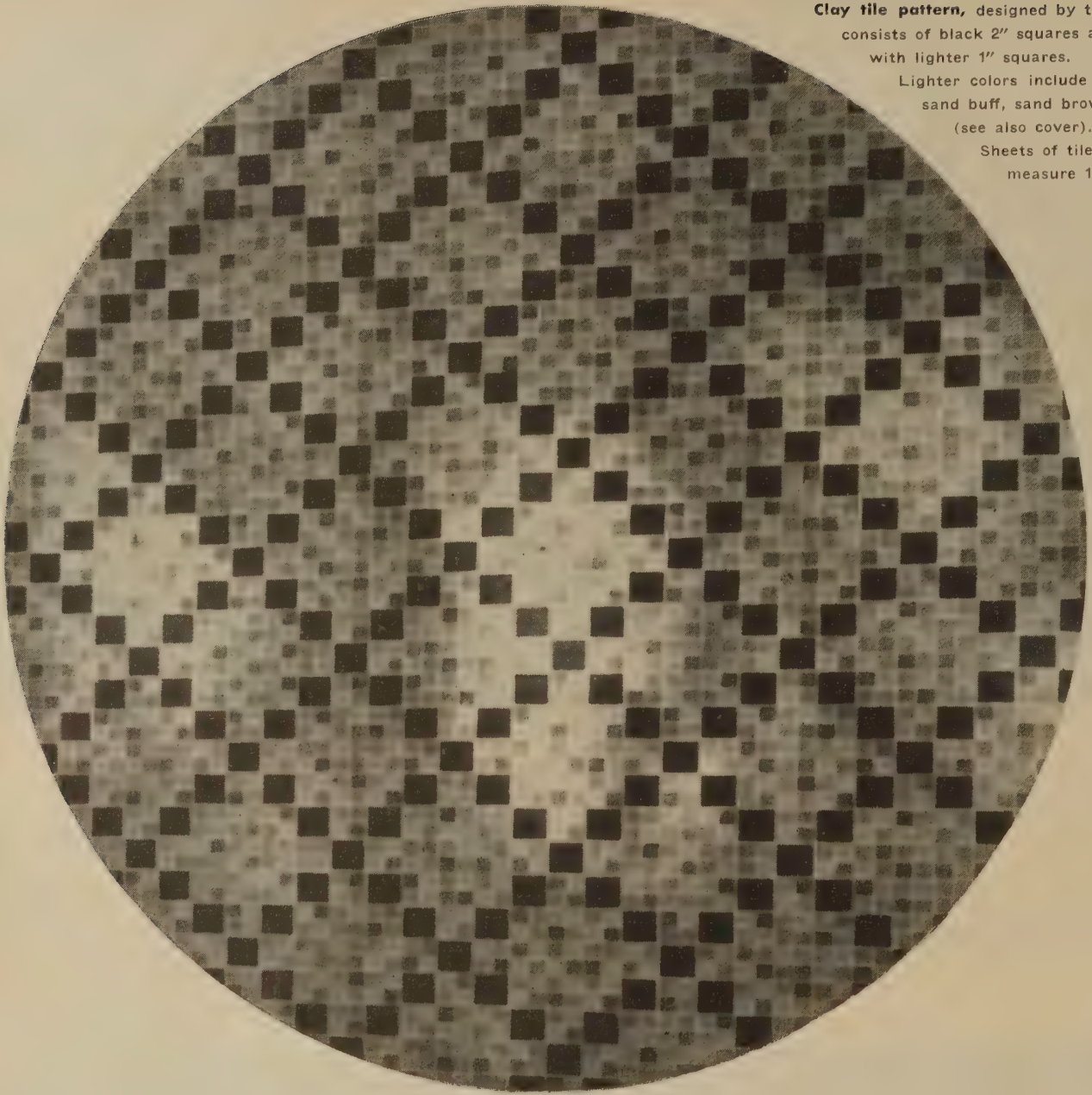


Eleven different floor plans, variety of elevations are offered in Foothill Park. Builders use modified grid pattern, "partly to save trees" (site is in orchard), "partly to keep costs down on pipe runs," add interest by varying setbacks 20' to 30'. Lots average 60'x110'. Sales record here: 280 in four weeks.

\$7,850, four bedrooms at a rock-bottom \$9,250

One-third of sales in new Foothill Park development (below) are four-bedroom houses





Clay tile pattern, designed by the architect, consists of black 2" squares alternating with lighter 1" squares.

Lighter colors include sand gray, sand buff, sand brown and slate (see also cover).

Sheets of tiles measure 12" x 24".

Decoration softens this geometric house

**On the outside: patterns
of clay tile—**

**on the inside: patterns
of nature, seen through glass**



Glass-walled living room faces southeast, is shielded on both sides by projecting wings of H-plan house. These wings create protected patio.

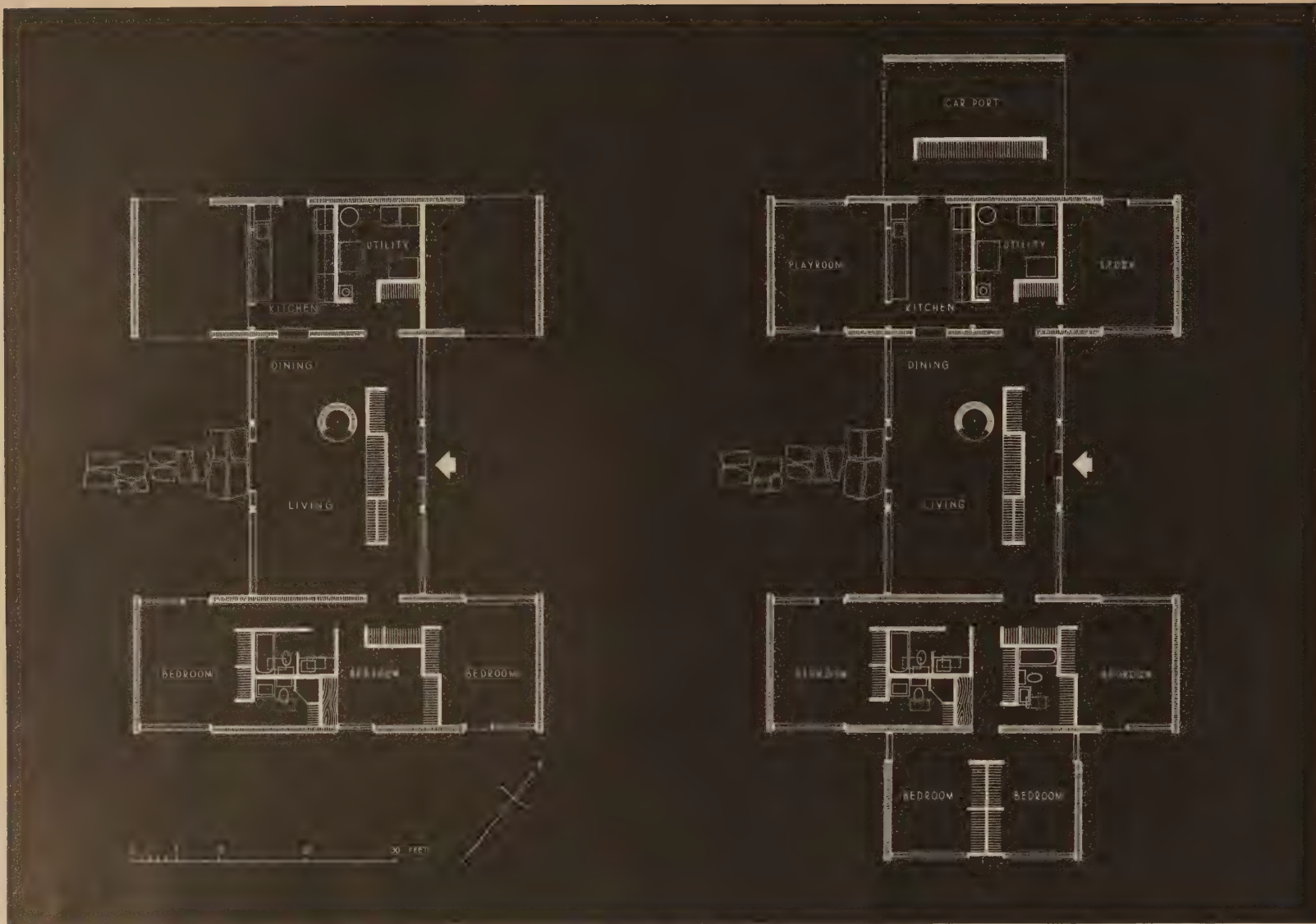
Glass-walled bedroom (below) is similarly protected on one side by shape of plan. Thus small rooms are able to borrow plenty of space from the outdoors.

"We are becoming aware of the need for decoration," says Architect John Johansen. "Man has always felt a need for patterns and textures to bridge the gap between his own dimensions and the bigger scale of architecture." In this small and pretty house, Johansen has tried to show new ways of using decorative patterns to soften the formal geometry of modern building.

On the outside, he has applied sheets of small-scale clay tiles. The material is handsome, easy to maintain, costs only \$1.45 per sq. ft. installed.

On the inside, he has used a more subtle decorative medium: the patterns found in nature. For each glass wall is, in effect, a floor-to-ceiling, room-width picture of a pleasant wooded landscape. Our ability to use large, uninterrupted sheets of glass now permit us to see "pictures" of *real*, rather than painted landscapes on our walls. Undecorated stucco walls contrast effectively with rich "nature-painting" beyond the glass.





Basic plan has three bedrooms, two baths, 2,100 sq. ft. under cover **Expanded plan** adds bedroom, bath, playroom, study, carport, totals 2,800 sq. ft.

H-plan is expandable, formal, self-protecting

This H-plan does three things, and does them well: first, it separates sleeping areas, living areas and utility areas in three clearly differentiated wings. Secondly, it puts the living area in the middle where it belongs, without turning it into a thoroughfare (solution: a free-standing storage wall that serves as an entrance-baffle and screens a passageway). And, third, the plan uses the sleeping and utility wings as giant blinders on either side of the all-glass living area, so that the living room has a great deal of privacy (plus semienclosed patios in front and in back). Glassy bedrooms are similarly protected. Although this house was built on a generous site, this kind of plan might make a good deal of sense on a 75' wide suburban lot. On such a lot, the window openings in the side walls might have to be reduced in the interests of privacy.

Making the house expandable was one of the plan requirements: the walls for a playroom next to the kitchen and a study beyond the utility room were built together with the basic house. These two roofed-over spaces serve as outdoor storage areas for the present. In the final expansion of the house, one bedroom will be added on the northeast side, and a carport and outdoor storage cabinet on the southwest side. The flat roof makes such extension simple.

LOCATION: Greenwich, Conn.
JOHN MacL. JOHANSEN, architect
EMIL TOIKKA, general contractor
THE NEW STORE, interior design



Indoor decoration consists largely of huge "murals" of wooded landscape behind glass. This concept of using landscapes to decorate walls is entirely traditional. Modern twist, of course, is that the landscapes are real rather than painted. Photo (above) shows view from living-dining area (see also below, right). Below (left) is view from bedroom into patio.



How much will the boom cost?

No question that 1955 will set a new record for dollar volume with starts close behind. But materials prices and pinches are matters to watch

Builders and lenders were taking no chances at underestimating the housing year 1955.

As if to compensate for the bearishness that proved so many of them wrong in their calculations for the year just past, last month's predictions were nearly unanimously in favor of the second biggest year, in starts, and the biggest ever, in cash outlay.

IN THIS MONTH'S NEWS

(a partial index)

NAHB CONVENTION: a four-page roundup of developments at Chicago sessions...pp. 37-40

FHA ponders black-listing 4,000 Sec. 608 builders who spurned controversial profits questionnairep. 41

Eisenhower calls for 'firm' program of 35,000 units a year, but hints end of public housing in 1958.....p. 41

SIDELIGHTS: Fanny May taps private money; California town votes 'strictest' zoning lawp. 43

How urban renewal may pep up tired cities is revealed by Somerville, Mass., second city to win US approval of its plans. pp. 45-47

PEOPLE: Oakley Hunter, lame duck Congressman, named HHFA general counsel; Joe McMurray is NY state housing chief....p. 47

Bill Levitt, nation's biggest builder, hit by NAACP suit to compel open occupancy in FHA, VA-aided housing.p. 51

STATISTICS: 1954 housing starts top 1.2 million mark; materials prices, building cost indexes creep up slightly.....p. 52

Houses are getting bigger and costlier, a new BLS survey shows. Figures are first in 3 years on house characteristics.p. 58

LABOR NOTES: Federal antitrust suit tries to crack high cost of glazing in Chicago; prefab boycott held illegal by NLRB.p. 66

OPINIONS: what some of the nation's press has said lately about the FHA probe and other housing mattersp. 82

Other NEWS on pp. 37, 38, 39, 40, 41, 43, 45, 47, 49, 51, 52, 58, 62, 66, 70, 74, 78, 82.

It was easy to see why. Admittedly the first half of 1954 was no great shakes as a boom year and there was more talk about the extent of the business dip than there was about broken records. But in the second half of the year construction records toppled. Easy money and the new Housing Act had combined to boom building into its sixth straight year over the million starts mark and almost everybody saw the boom continuing. The big new question was: would the building boom in which housing bulked so large outstrip the supply of some materials and, as in 1950, inflate costs? This will bear close watching.

Pay your money. The year 1954, according to the preliminary, subject-to-revision estimate by the Commerce and Labor Departments ended with 1,215,500 starts. The official BLS prediction for 1955: 1.3 million. NAHB President Hughes had forecast 100,000 higher: 1.4 million. HOUSE & HOME's own estimate of 1.2 million, as evolved by Economist Miles Colean, was admittedly a minimum. But Colean, although joining with the experts who had no doubt that 1955 would be the second best year ever, did not see total starts in 1955 passing 1.3 million.

The great bulk of '55's housing would again be concentrated in metropolitan areas, which were still experiencing an unprecedented migration from the nation's farms. The Census Bureau last month found that 77% of new one-family homes now go up in metropolitan areas (see p. 58). And the Minneapolis Federal Reserve Bank reported that the market for new homes in many smaller towns in its five-state region has "reached saturation." Reason: "an almost static population since 1940." In many towns, said the bank, "practically the only demand comes from retiring farmers."

On the expenditures end of things, the government estimated cash outlay for nonfarm residential construction last year at \$13.3 billion, a 22% rise over 1953. For 1955, Commerce and Labor saw another rise—of close to 13%—to a total \$15 billion. It therefore seemed sure that in terms of dollar volume 1955 would be the biggest in history. It would certainly top 1950's \$12.6 billion, the highest until last year.

How much credit? Speculation as to how long mortgage money would be plentiful varied slightly by region, but the consensus

among lenders was that there would not be a tightening before autumn. One opinion: "If we keep on with the present rate of municipal issues, the present rate of homebuilding and of industrial construction, it seems likely there will be a tightening, but it will be a tightening at a high rate of activity. For example, it might keep us from going from 1.35 million units to 1.4 million." A few people were worried that the Federal Reserve might curtail mortgage credit. Again, it seemed unlikely. The Fed can change the general credit picture in only two ways—by selling bonds in the open market or putting up another long-term issue—and for the time being, at least, those in touch were doubtful that it would. They did think, however, that if the market tightened of itself, the Fed would not step in to ease it.

One mortgage man said he expected some tightening by August. "Why? There will be less money because so much will have been put out by then to finance the high level of activity. Also, I do not think the Treasury will help much."

The cost picture. Wholesale prices of building materials were rising. But HHFA's phrase that they were rising "slowly but steadily" was to the point. Since 1954's low-point last June, the price index—according to E. H. Boeckh—had risen less than 3%. The South was still the area where dry wall was in short supply (H&H, Jan. '55, News), obviously because builders use more of it there than elsewhere. A "gray market" in gypsum lath was reported in Florida and Georgia. In other areas, it was still hard to get a fixed delivery date for some wall materials.

The President's highway program of \$101 billion had set off expansion in the cement industry, but demands of the program would not be felt in 1955. No serious shortages of cement were expected. As one industry leader phrased it: "There will undoubtedly be spotty, localized, seasonal shortages."

Reynolds Metals, the nation's No. 2 aluminum producer, upped primary metal 1¢ a lb. Alcoa and Kaiser were expected to do the same. Copper producers expressed doubt that they would be able to keep present prices.

Lumber prices were picking up in the Pacific Northwest and promised to go higher in the face of an expected shortage. Serious transportation problems had developed, cut-

ting available ship space for intercoastal trade and forcing lumber shipments onto the railroads. The latter were already crowded in the general business upswing and freight car shortages were expected by summer. Chances of a further rise in lumber prices also seemed logical after the 84-day strike, involving 100,000 lumber men, brought about a recommended 7½¢ an hour pay boost retro-active to Jan. 1.

Big Builder William J. Levitt jumped prices on his Levittown, Pa. Country Clubber (three-bedrooms, two baths) \$500, to \$17,500. He boosted the price of two smaller homes by \$200 (to \$9,250 and \$11,250) for houses delivered after April 1.

Competition, meantime, was driving prices of a few house components down. Armstrong Cork and Congoleum-Nairn sliced vinyl-asbestos floor tile around 10%. Chrysler's Air-temp Division shaved \$30 to \$108 per unit off its prices for 1955 room air conditioners.

Bigger and better. The trend toward a bigger home (see p. 58) seemed more than likely to continue in 1955. And with more and better equipment going into the bigger home it was doubtful that the selling price would drop. As the industry moved into the new year, these influences were also noted:

▶ VA 100% loans were still very strong in certain sections. The fact that the volume

of nothing-down loans had stabilized and even fallen off in certain areas was offset by the feeling of some lenders that there would be a rush to VAs this year before the legislation, for most veterans, expires in 1957.

▶ Older homes were expected to play a greater part in the home market this year than last. Their price-down 10-15% last year compared to 1953 and showing signs of stabilizing—was a major reason. And favorable terms of the new Housing Act had pushed up the number of existing houses insured under FHA and the dollar volume of insurance written. In the first three months the act became operative, application on existing construction amounted to 49% of total home applications.

Census reveals half of \$7 billion fix-up market is do-it-yourself

The paint-up and fix-up market is not just bigger than anyone realized; it is also very different from what many people thought.

Biggest surprise revealed by the detailed report just issued on the Census Bureau's first scientific sampling of it is this: more than half, the \$7.2 billions homeowners spent last year to maintain and improve their homes was do-it-yourself—\$3.8 billion of it to be precise. Professional contractors (and the materials they provided) accounted for only \$3.4 billion.

The Census estimate of \$7.2 billion covered owner-occupied one- to four-family units only. Whether that figure could be projected upwards to \$12 billion to maintain and improve all kinds of housing units (i.e., including rental units) was doubtful, for most rental units are in old and often blighted areas where poor maintenance is notorious.

Details that count. Census had announced its new totals on owner fix-up in September (H&H, Oct. '54 News). But the final mid-December report revealed far more meaningful details about the characteristics of fix-up expenditures. Items:

▶ About 70% of the 25 million US homeowners spent some money for fix-up or major alterations during the January-May survey period. But the average outlay was only \$61.

▶ Surprisingly few houses get any substantial fix-up work. Only a tenth of the nation's homeowners who spent anything spent more than \$500 in the five-month span of the study; they accounted for half of the total outlays.

▶ Older homes tend to get little more than essential repairs.

▶ People are most apt to spend fix-up money just after they have bought a new or old house—in other words just after they have been doing business with a builder, a realtor or an architect.

▶ While 62% of homeowners spent money for repairs, the average outlay (median) was only \$30. And that includes items like paint and wallpaper, replacement fences or bathtubs.

▶ Nearly a third of the \$3 billion that apparently went into repairs for the whole year may have been paint and wallpaper. The Do-It-Yourself Information Bureau claims do-it-yourselfers spent \$940 million for these two items during 1954.

▶ Only one-third of homeowners spent anything at all for alterations during the five-month survey. Average outlay: \$56. Alterations covers items like insulating an attic, building a retaining wall or a den in the basement.

▶ Only 3% of owners spent money for additions, but the median outlay was \$165.

▶ The do-it-yourselfer spent only 5% of his money on tools. But he invested 25% of his estimated \$3.8 billion-a-year outlay on items like refrigerators, freezers, clothes washers, driers and stoves. (Census included appliances as part of expenditures for fix-up materials.) Involved: some \$950 million a year.

The new Census report has led some sources to theorize that the total housing fix-up market may reach \$12 billion a year (compared to the \$13.5 billion new housing market). The \$12 billion figure, of course, is based on the proportion of owner-occupied vs. rented units. But otherwise it is largely guesswork.

THE NEW FIGURES

Millions of dollars:	OUTLAY IN 5 MONTHS	EXPANDED TO 12 MONTHS
Alterations and improvements....	\$1,410	\$3,384
Additions	333	799
Repairs and replacements	1,264	3,033
Total	\$3,007	\$7,216

How the homeowner spends this money:

Contract work	\$1,410	\$3,384
To buy materials (do-it-yourself)	1,596	3,830

Source: Census Bureau; 12-month figures expanded arithmetically by HOUSE & HOME.

Potential untapped. Through the welter of statistics, one big fact sticks out: the building industry is not yet geared up to making a real business of fix-up on any wide scale. The do-it-yourself market would probably be smaller if it were not so hard to get fix-up work done at the right price by professionals.

How to project the industry into the fix-up market is obviously a tough problem, but it is one which smart builders, manufacturers and distributors seem about ready to tackle.

SHAPE OF THE HOMEOWNER FIX-UP MARKET

It's a \$7.2 billion-a-year market



BUT
more than half—
\$3.8 billion—
is do-it-yourself



AND ONLY
\$3.4 billion
goes to contractors





Part Californian, part oriental,

This little hillside house is the only residential entry in the recent southern California AIA competition to win an honorable mention from the judges.

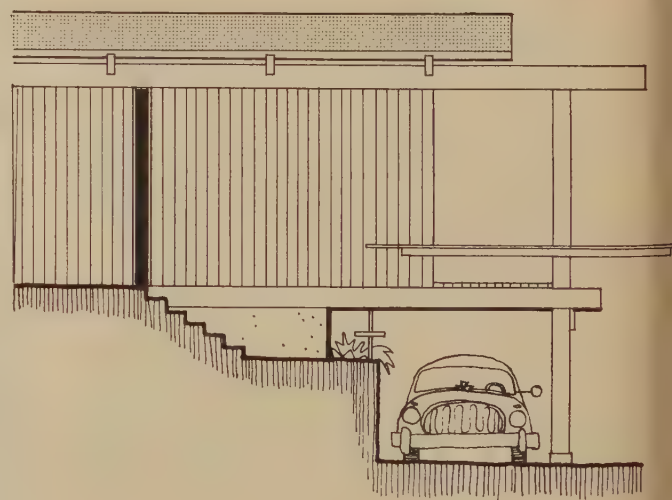
The house was singled out for several reasons:

► First, because it seemed to be an unusually subtle blend of the oriental tradition adopted by early California architects (in its scale, its balance and in its decoration) with the efficient gadgetry of modern American living.

► Second, because it seemed such an excellent solution of a very difficult site problem—a *common* site problem, nowadays, since steep hillsides are being used more and more all over the US by land-hungry builders.

► And, finally, because its details and its sparing use of bright colors showed how much an imaginative firm of architects can do even within a tight budget.

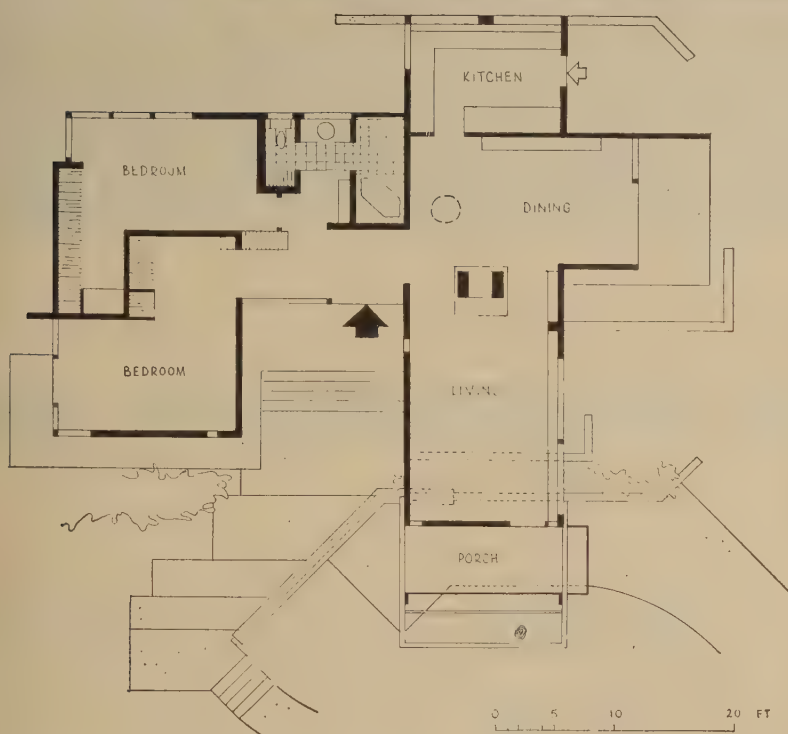
To many observers, this charming little house may seem just another example of the wholesome influence of oriental architecture upon California living. But to the AIA jury it was a fine example of the give-and-take of ideas between entirely different cultures that goes on constantly in a free society. Result: a happy unity of modern practicality and ancient art. The construction cost is only \$11 per sq. ft.



Site is very steep, very narrow. By raising part of house on posts, architects created useful carport under porch (see photograph and elevation above). Exterior walls are random-length, striated redwood boards with joints deliberately emphasized by thin horizontal battens.



Interior patterns are very decorative, geometric, reminiscent of both Japanese design and Mondrian's paintings. Note occasional use of translucent glass panel next to clear glass, oriental touches in prints and sliding panels. Exposed lintel between ends of roof rafters was stained in different bright colors by owner (a Technicolor expert)—in effective contrast with the natural wood used in roof planks.



entirely modern



Dining area is on grade at uphill end of the house. Excellent siting of small structure turned the steep plot into a distinct asset, yet kept the plan of the small (1,400 sq. ft.) house all on one level.

LOCATION: Pasadena, Calif.
SMITH & WILLIAMS, architects
EUGENE GRAHAM, general contractor



Occasional Americanisms, like glass gable end in the kitchen and the plastic sky dome over center of house, were handled with grace and restraint to blend with the oriental feeling of the rest of the house. The vertical slot window at far end of living room (see also exterior, opposite) is a fine device for preventing dark corners, for making small rooms seem bigger, and for getting sunlight on the walls.

Architect John Highland of Buffalo is one of the country's most successful specialists in design for builders, although half his big practice is on nonresidential construction. He has had a prominent role in AIA and NAHB committees.



W. Daran

COULD YOU SAVE MONEY

AND MAKE MORE MONEY

IF YOU PAID YOUR ARCHITECT MORE?

Some builders pay \$10 a house for stock plans. For this they get nothing but pieces of paper that may or may not fit the local climate, the local way of building, the changing local taste, the changing local market, and the particular site where the house is to be built.

Other builders retain an architect but balk at paying him more than \$25 a house. For that \$25 they get a reversible floor plan, three or four suggested front variations, a rendering that makes the house look bigger than it will be and two or three suggestions to catch the woman home buyer's eye.

A few builders try to take full advantage of their architect's long training and experience with other builders and on scores of custom-designed houses. For this they pay \$100 or more a house—more than FHA will allow them credit for in its appraisal—because they want to make it well worth while for the architect to give them his very best effort.

Before you decide it is cheaper or more profitable to get along with a plan book at \$10 or to be satisfied with an architect's off-the-cuff effort at \$25, you might like to know more about the services for which 38 builders in ten states pay Architect John Highland of Buffalo \$100 or more per house.

George L. Wetzel



Before Highland began designing in Rochester this style of house was built by Jablonski in 1946. Colonial is still popular with other builders. Now Jablonski builds Highland designs, top of page.



Marc Neuhoof

What a builder gets

Two ideas are basic to all John Highland's work with builders:

Idea No. 1—Success or failure of a new house design will be decided by work the architect and builder do together before the architect touches pencil to paper.

Idea No. 2—Good timing is essential. Try to plan your models three years ahead, so your public will be ready for something better by the time you put it on the market. The architect can and should suggest many new ways to make houses more livable, but he had better not get too far ahead of the market.

To make sure his timing is right, here is Highland's schedule.

Stage 1

1. Talk with the sales staff or the real estate firm which will sell the houses to get suggestions and to make sure they understand and approve the house the architect and builder are trying to develop. Salesmen can't or won't sell what they don't understand and, if lukewarm, are too ready to agree with the potential buyer's prejudices instead of explaining advantages of new features.
2. Talk with the local VA and FHA to see how far they will go in approving new ideas and to make sure they will not penalize the new designs in their valuations.
3. Analyze the local market: changing income levels, changing competition, changing availability of existing houses in different price ranges.
4. Study local preferences, which may be quite different from preferences in other areas. Do buyers have strong prejudices as to sizes and locations of bedrooms, sizes of doors and windows, pref-



White Village, designed by Highland, built by Jablonski Homes, Inc. of Rochester, N. Y.

from an architect for \$100 a house

erences for basement, crawl-space or slab construction, front or rear living rooms, open planning, beamed ceiling, low roof lines?

5. Learn the appraisers' attitudes on all these points and study the degree of rigor mortis in banks and lending institutions. The first man who must be sold a new design or a new material is the man who must put up the money.

6. Get to know the builder's organization. Study its strong points to take advantage of special skills. If the builder has skilled cabinet workers, built-ins will be more economical.

Stage II

7. Analyze the prospective building site: contours, soil conditions, drainage, utilities, trees, approaches.

8. Make preliminary plan studies, roof elevation studies.

9. Show FHA, VA and lending institution preliminary plans.

10. Confer with builder and with manufacturers concerning parts and materials such as new windows, new cabinets, etc.

11. Negotiate with manufacturers on costs of new parts. (The time to choose windows, cabinets, materials, etc. is when salesmen are persuading you to use their products, not after parts have been committed in finished drawings.)

12. Finish detailed drawings and specifications for the prototype house in collaboration with builder.

13. Make preliminary studies on all modifications, pivot versions, alternate expandable plans.

Stage III

14. After prototype house is finished, redraw plans to make sure the drawings reflect any changes made in construction. This includes a review and study of prototype house during construction and its acceptance by lending and insuring agencies.

15. Make working drawings and specifications for the balance of all houses to be built, incorporating experience gained from prototype. (A dimension change in a bedroom, for example, may make considerable difference in sales acceptance.)

16. Schedule colors and materials, inside and outside, including painting and such materials as tiles, counter tops, prefinished panels, lighting fixtures, wallpaper.

17. Make a study of each individual lot and plot the location of the house, paying attention to the relation between each house and its neighbors.

18. Suggest landscape treatment for each basic type of house. If builder does not include landscaping, work out a plan which may be given free to buyers.

19. Give all possible help with sales exhibits, including color renderings, slides of renderings, assistance in setting up visual exhibits for model houses or sales offices, conferences with advertising and sales organizations. Some architects help write the advertising copy, prepare radio or TV shows, advise salesmen on advantages of the houses.

20. Drink martinis and consume hors d'oeuvres with the builder on opening day. Study public reaction.

These factors, Highland says, make a good house

A good neighborhood: growing out of the architect's intelligent use and understanding of the whole property and its character.

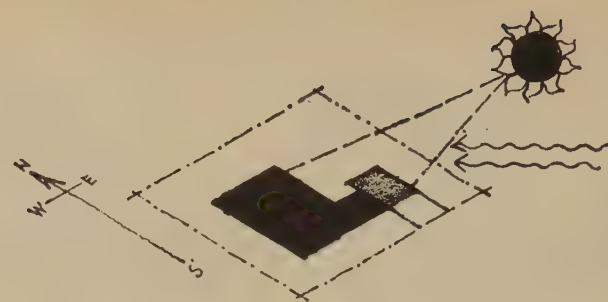
Best orientation: with each house placed on its lot for best use of sunlight, views and breeze. Proper orientation and study of climatic factors may eliminate need for air conditioning, or will materially reduce the operating costs of the air-conditioning system if one is used.

Patios: planned to supply more than one big outdoor living area, with a separate bedroom patio for adults for reading, sunbathing, etc., which is away from a general patio for youngsters, family use and guests. Patios can be kept private and be brought "into the house" if they are properly fenced for privacy. While house building costs run from \$8 to \$14 per sq. ft., patios can serve as excellent living areas for 40¢ per sq. ft.

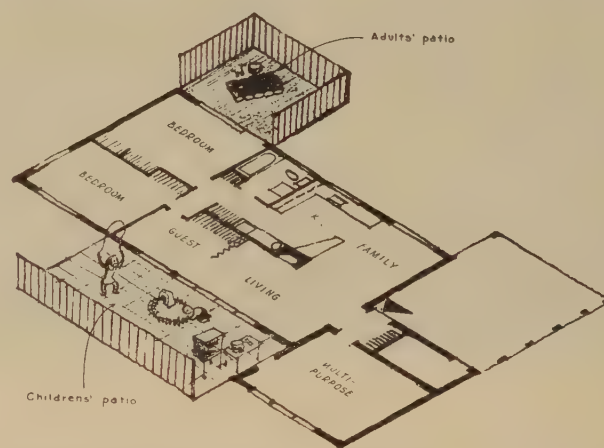
Central kitchen: serving as the pivot around which the whole floor plan of the house is designed. Its location relates to the entrance hall, garage, dining room or dining area, living room, family room. The kitchen is part of the activity area and should be open to it and "furnished" with tailored cabinets and appliances in harmonious colors. A woman working in her kitchen should have a view of the family room to supervise her children, watch TV, and to talk with her guests. Ideally she should also be able to see small children at play outside.

Family room: in many houses now included in the living area and frequently taking the form of a farm kitchen or large living kitchen. Ideally it has large windows and faces a patio. It is not in the basement. It has a "martiniproof" floor and hard-to-hurt surfaces so that host and hostess can enjoy their own parties. When the family room is also the TV room it should be kept in mind that kids watching TV are usually horizontal and always eating.

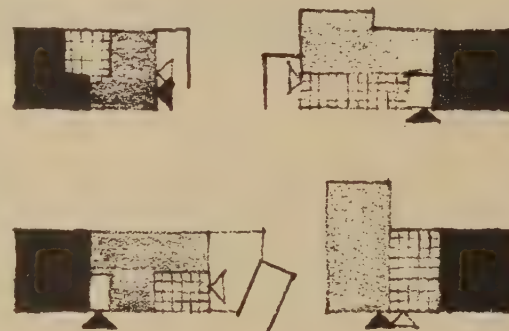
Chassis plan: best defined as one whose basic chassis permits a variety of interior arrangements, number of bedrooms, addition of family room, etc. without disturbing framing panels, trusses, precut roof beams and other standard parts.



Sun and breeze are free, should be carefully considered

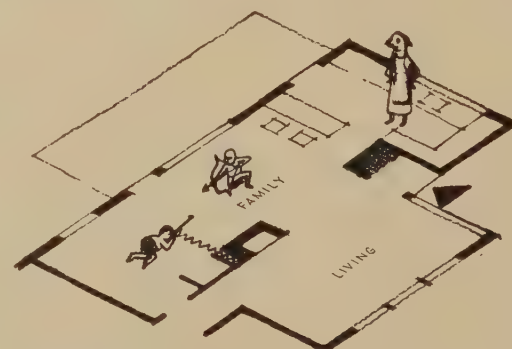


Master bedroom should have a private patio



Sleeping Living Working

Kitchen is the pivot area of the entire house



Open kitchen gives wife view and supervision



Chassis plan provides economies

Pivot plan: one which turns four or six ways on the lot, retains basic economies and takes best advantage of its particular lot. Carport or garage and patio can be shifted about the house. It is better to get variety this way than to depend on decoration and forms of "smorgasbord" to make each house look different from its neighbors.

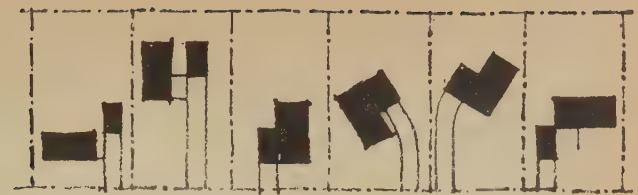
Good circulation: have all rooms, if possible, accessible without going through another room. However, the use of either dining room or family room for circulation purpose is acceptable. In some plans the bedroom hall has been made part of the family room area.

Noise reduction: take into account today's frequent comment "We need a room to get away from TV." A home is more than a place for community living, it must also provide private areas where each member of the family can live his own life with a minimum of friction. The open plan gives a highly desirable sense of space but it lets noise travel easily. Acoustical design, long recognized as important in offices, is just as important to preserve the nerves of families at home.

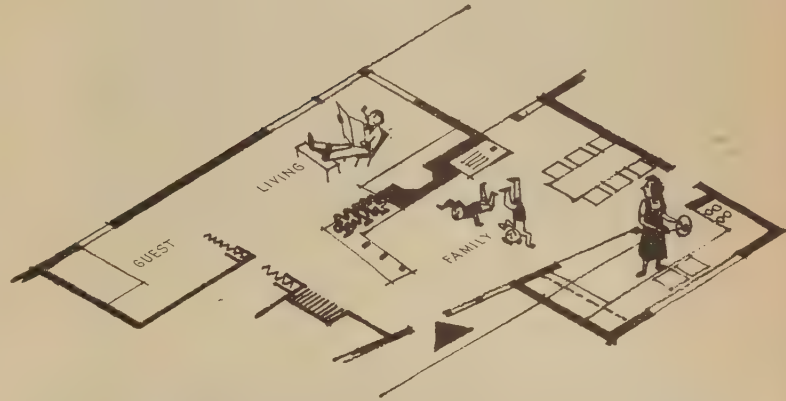
Color: have colors better controlled to blend in open-planned houses. Houses should not have a yellow room, green room, rose room. There should be correlated colors. It is possible to establish a color "vocabulary" which uses a major color through the interior. This unity adds spaciousness. Many builders use a color consultant if the architect's staff does not include a color specialist.

Storage: for more and more possessions acquired by modern families, possessions of all kinds which require ample space. A livable house has well planned storage space.

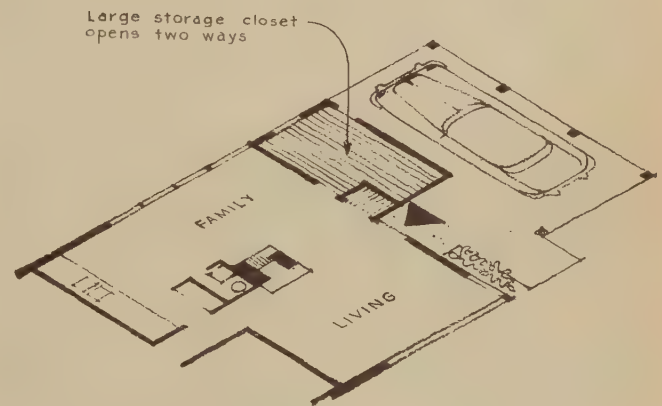
Laundry: the location should get careful study. Laundry should be related to bedroom and bathrooms, should not automatically be put in kitchen or basement. In a two-story house consider putting it on the second floor where space is not so valuable. Consider special areas, too, space for hobbies and a "mud room" where kids can leave overshoes and outdoor clothing.



Basic plan should pivot four to six ways



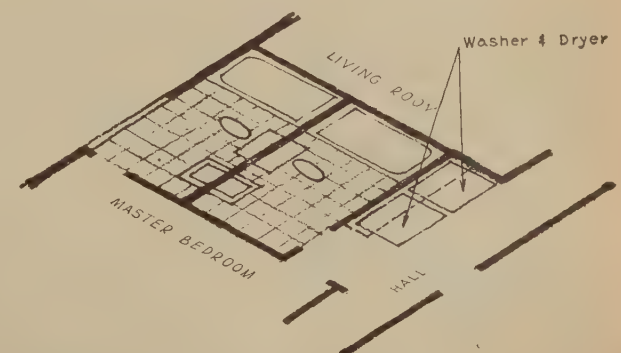
Every house needs to have a quiet area



Storage should include jumbo closet off living room



Laundry must house washer, drier, ironer or mangle, linen



Laundry works well close to bedrooms and bath

Builder Theodore Jablonski and his son, Ted Jr. of Rochester, N. Y. have been clients of John Highland since 1947. They build from 30 to 40 houses a year including five to ten Highland-designed custom houses which sell in the \$30,000-\$40,000 range.

They are Highland fans because year after year he gives them houses that sell well. "A good architect will make money for his builders," says Ted Jr. "Every year we try to do something new and better. I'd say our houses sell faster than the competition and we have to do almost no advertising."

Their White Village project, shown here, has 36 houses which sold at \$16,500 to \$27,000. About 80% of sales have been ahead of construction. These were the first houses in town which had low, marble chip roofs, open beamed ceilings, open plans and 100' lots in this price range. They were planned originally as slab houses but the lenders insisted on basements.

In this price class buyers don't want "look alike" houses, so Highland gives the Jablonskis nine variations to offer. There are front or back living rooms, a variation of dining room-family room, a third bedroom that can be enclosed or opened to the living room, several ways of handling the nonheated storage areas and a variety of garage or carport locations. This year there will be even more variations.

To the Jablonskis, Architect Highland brings his valuable knowledge of what is selling well with his clients in more than a dozen states including prefabricator Midwest Homes, for whom he is also chief architect.



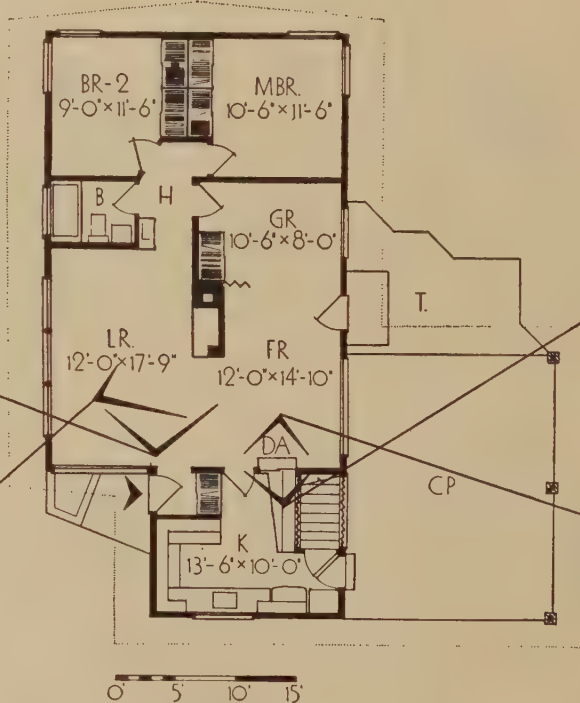
Most contemporary house in Rochester, this \$16,500 model has 1,100 sq. ft. plus full basement. Exteriors are redwood or stained shingles. White roofs and 3' overhangs keep houses 10° cooler in summer than unprotected houses. Some fencing is included. Plan and interior views are below.

Highland designs keep Builder

Photos: Marc Neuhoef

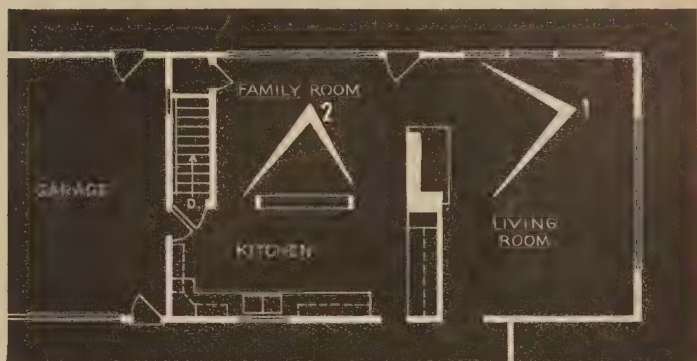


Open planning, corner fireplace and beamed ceilings are among the features which make these White Village houses stand out in Rochester. Last year's models have separate dining room but 1955 models will offer a combination family room-dining room which may outsell the earlier version.

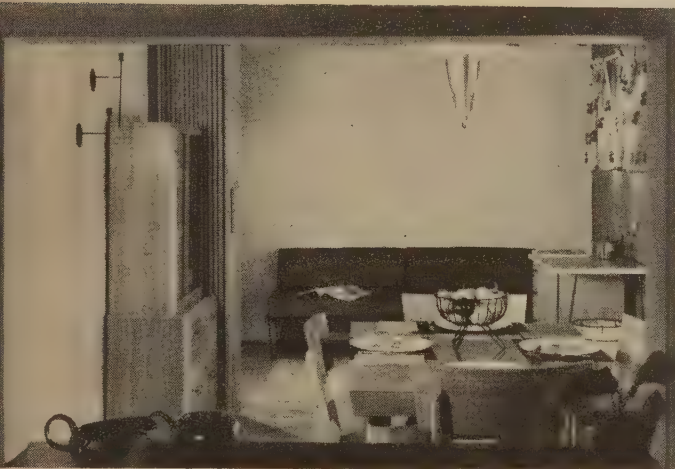




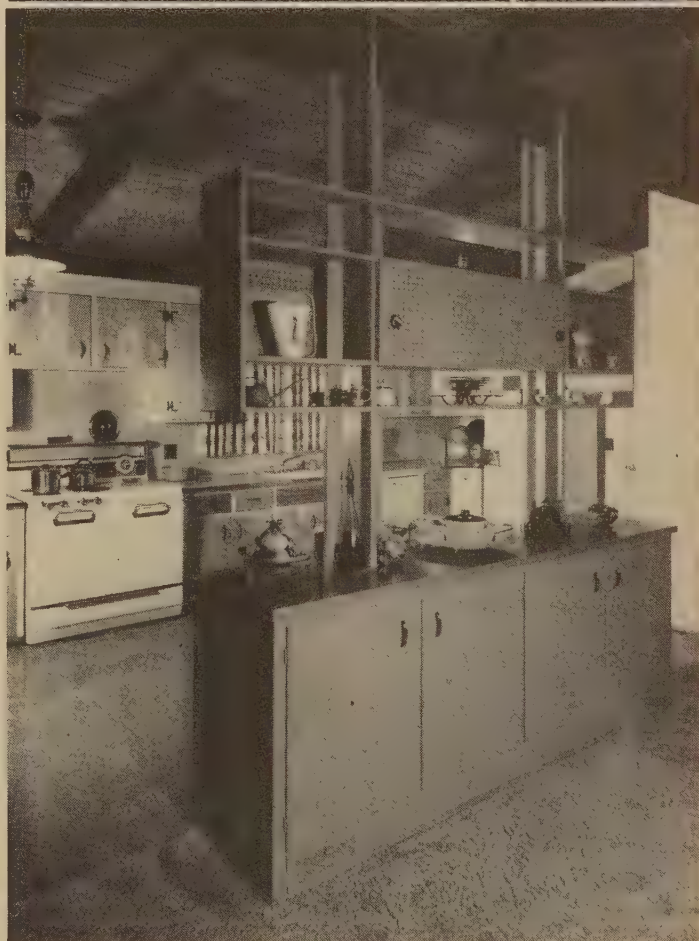
1. Combination family room-dining room behind fireplace in photo above, and plan below of large, semicustom house. Opening dining room to kitchen and calling it a family room encourages multipurpose use.



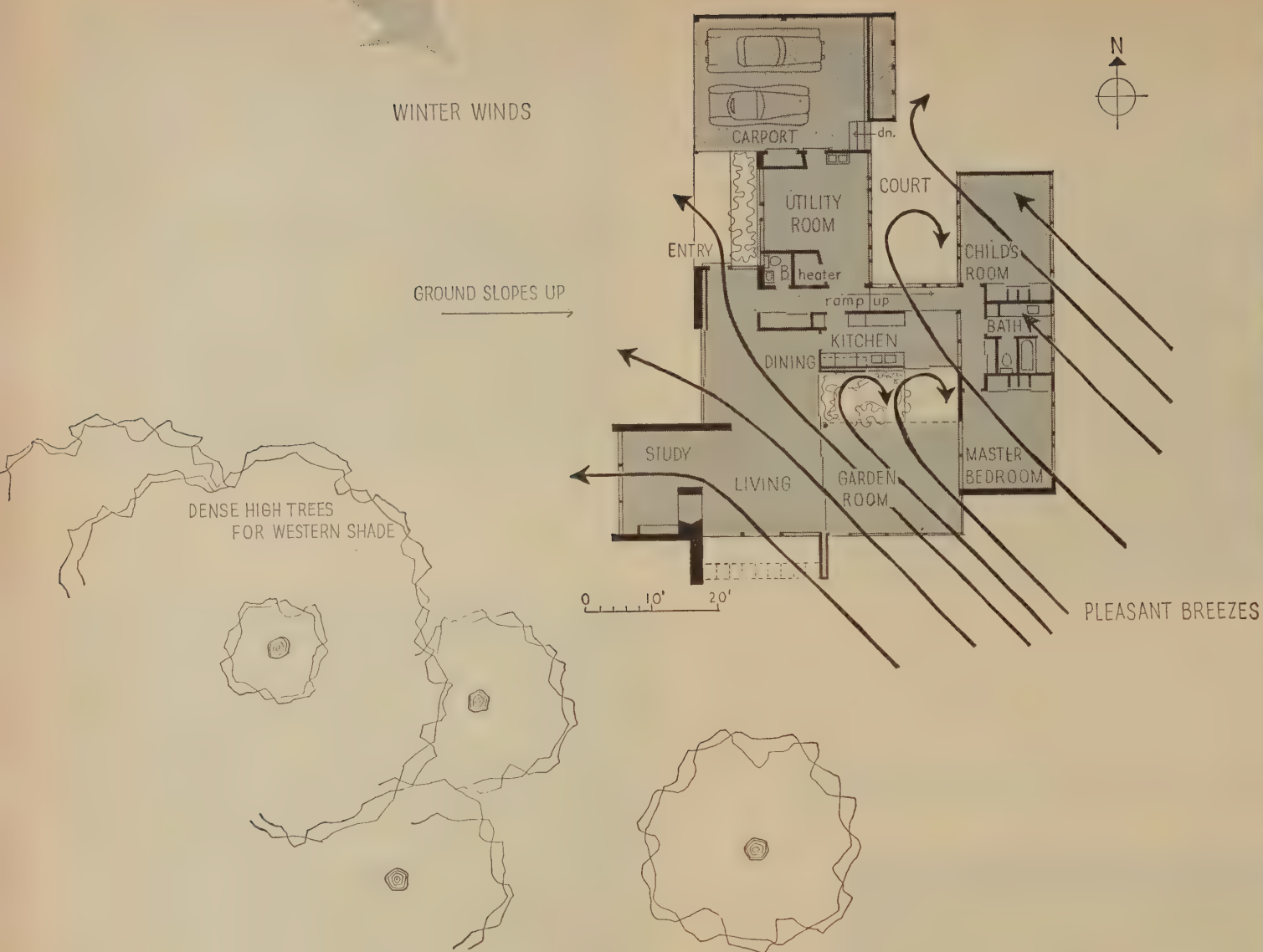
Jablonski ahead in Rochester



Guest room above is separated from family room-dining room by folding door, but two-thirds of buyers wanted third bedroom enclosed. Highland usually puts family room next to kitchen (below). The 1955 models will have larger kitchen-family area.



2. Kitchen is wide open to family room but cannot be seen from living room. In 1955 models appliance colors will harmonize with backgrounds, be less conspicuous than they are here.



Your houses for next summer can be

20% cooler without air conditioning

LOCATION: Yukon, Okla.
 RICHARD A. KUHLMAN, architect
 DR. D. S. HARRIS, owner
Consumers first saw this house in
House Beautiful

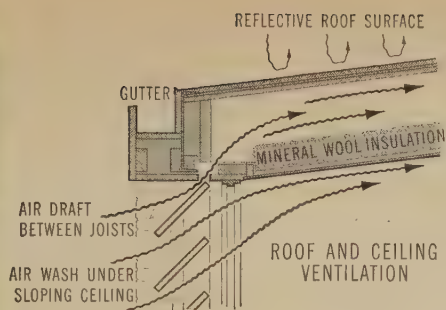
Last summer when the outdoor temperature of Yukon, Oklahoma was a scorching 105° the indoor temperature of this house—without air conditioning—was only 85°. This spectacular performance is based on the fact that Architect Richard Kuhlman designed the house to work *with* the climate instead of against it.

A house like this which makes its own climate demonstrates two major points to architects and builders:

1. a hot-climate house *without air conditioning* can be kept reasonably cool if it is designed right;
2. an *air-conditioned* house can be cooled cheaper and more efficiently if the designer uses climatewise ideas.

Architect Kuhlman uses a whole bag of tricks, some as old as the Bible, some as new as tomorrow. Oldest trick: leave a hole in the roof to let the hot air escape and to create a flue action—a principle still used in hotels and houses in the tropics that are built around an open court. Photographs and drawings illustrate other ideas, including a venturi blow-through, air scoops, a ventilated roof and even a make-it-yourself breeze.

All photographs and drawings courtesy of House Beautiful
Photographs by Maynard L. Parker
Drawings by Sigman-Ward



Ventilated roof is of prime importance in keeping house cool. Air space between roof and joists is ventilated, which is an important cooling device whether a house is air conditioned or not. A series of louvers (which also show in photograph) keeps air moving along ceilings. Heat is reflected from roof's surface. A third important factor: insulation.

Wind control, both winter and summer, is a key element in design and siting. This facade faces northwest and is almost closed to keep off winter winds. Plan (opposite) shows how trees shade house and how pleasant summer breezes blow through the wide-open plan.



Botanical proof that this house constitutes a cool oasis in the midst of a hot Oklahoma climate is that these plants thrive here. Water alone would not make such plants grow as caladium, fern, dicentra, alocasia, fig and ginger. Hot air rising through openings in roof helps draw in cooler air from outside.

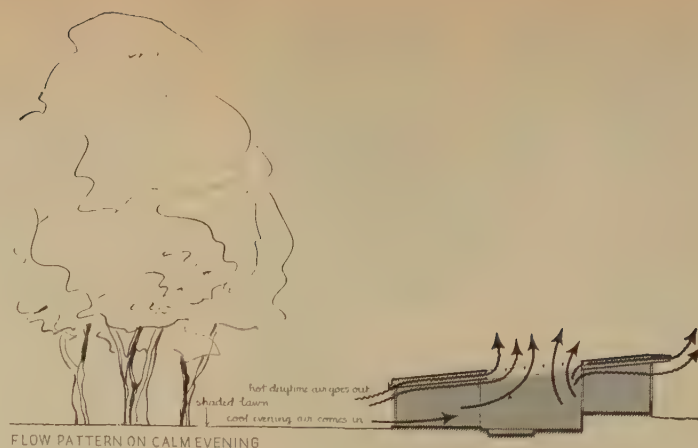
Open house all summer is kept by owner, Dr. D. S. Harris, because he has 65' of wall wide open to pleasant summer breezes. The design of his house embodies what aeronautical engineers call the venturi principle: taking air in through big openings and funneling it out through small openings speeds up air movement, gets more cooling value out of mild breezes.

The Harris home has been called the only house in town with a breeze because it is so designed and located that it actually creates a breeze where apparently none had existed. How such a breeze operates is well-known to pilots of motorless sailplanes or gliders, whose success in soaring depends on finding rising currents of air. It would be no surprise to them that on summer afternoons as the hot air in the Harris house rises through the roof opening, it is replaced by cooler air that flows in from a shaded area of the lawn (as the upper drawing at the right illustrates). Trees shade house as well as lawn, begin to cool it down in late afternoon.

Lessons for the air-conditioned house

At first glance there may seem to be no design lessons here for the architect of an air-conditioned house, whose purpose is to shut out all outside air. But the owner of many an air-conditioned house would be happy if he could operate his equipment for two months a summer rather than four and if it ran for fewer hours per day during the hot weather. Architect Kuhlman shows him how to do it.

A house designed properly for its climate, as this one is, would use mechanical cooling for fewer days per summer: starting later in the spring and shutting down earlier in the autumn. This house also shows the benefits of utilizing trees for shading the house, for cooling surrounding areas and for creating cool breezes. Of great importance also is the ventilated roof which demonstrates one way of creating an air space through which natural ventilation can flow.



In summer wind control consists of shutting off the hot southwest breezes but in welcoming the cooler winds from the southeast, which flow through the open house (as shown here). Ground slopes up from left to right, and angle at which the roof meets the breeze acts as an air scoop. Descending roof helps to squeeze the wind through the house, speeding it up through roof and window openings.



"Believe it or not" feature of this house is the way it creates a breeze when none exists. As hot air rises through the roof opening, it creates a suction and hot air is replaced by ground-level air that has been cooled by trees and shady lawn. Houses with open courts and roof ventilation are common in tropical countries.

A house can make its own climate



Living room, as seen from study, with garden room beyond. Large rooms and the open plan suit the Harris family, who have entertained as many as 80 people in comfort.



Open planning not only opens the house visually but is important in letting summer breezes blow through. Yet in winter, garden and garden room can be shut off.



House is expandable in summer when big glass walls are shoved back into pockets and living room is furnished to include the garden room (seen here at the far left). Sloping ceiling results from fact that house is built on two levels which follow the contours of the land. The bedroom wing (to the left of the rooms shown here) is several feet higher than the rest of the house and is reached by means of a ramp.



The Architects Collaborative, architects and builders



The split-level idea has been with us for centuries

What's so good about splits?

They sell like hot cakes but do they make sense?

Split levels sell. In fact, after three years they sell better than ever. They sell when they are ugly (as most of them are). They sell when they are handsome (as they sometimes can be). They sell when they make sense. They sell almost as well when they make no sense at all.

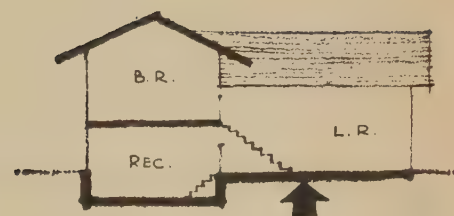
The reasons they sell are simple: (1) they are different, and people are ready for something different, (2) they are bigger, and people want something bigger. It's almost impossible to do even a bad split with less than 1,000 sq. ft. plus the built-in garage. It's almost impossible to do a good split with less than 1,650 sq. ft. plus the built-in garage.

The one most important thing to understand clearly before you plan a split is this: the split is a difficult, costly, and often ugly way to build a small house, but it is a good way to build a house that is just too big on one level to work well on a small lot.

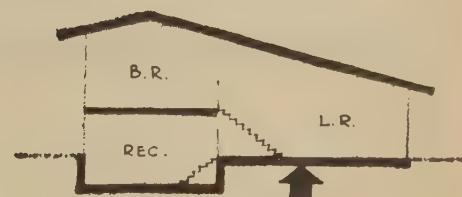
There are lots of things buyers don't like about the splits they live in. Most of them add up to the same thing—the split they bought is too small to be good.

To hear what they dislike and what they like, turn the page.

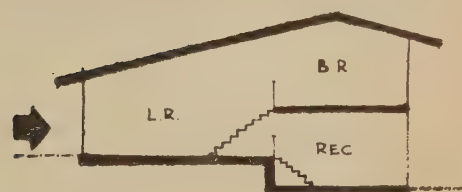
Here are the four commonest splits



The offset side split—still the most common type and apt to be the ugliest. Usually the lowest level holds the garage and recreation room.



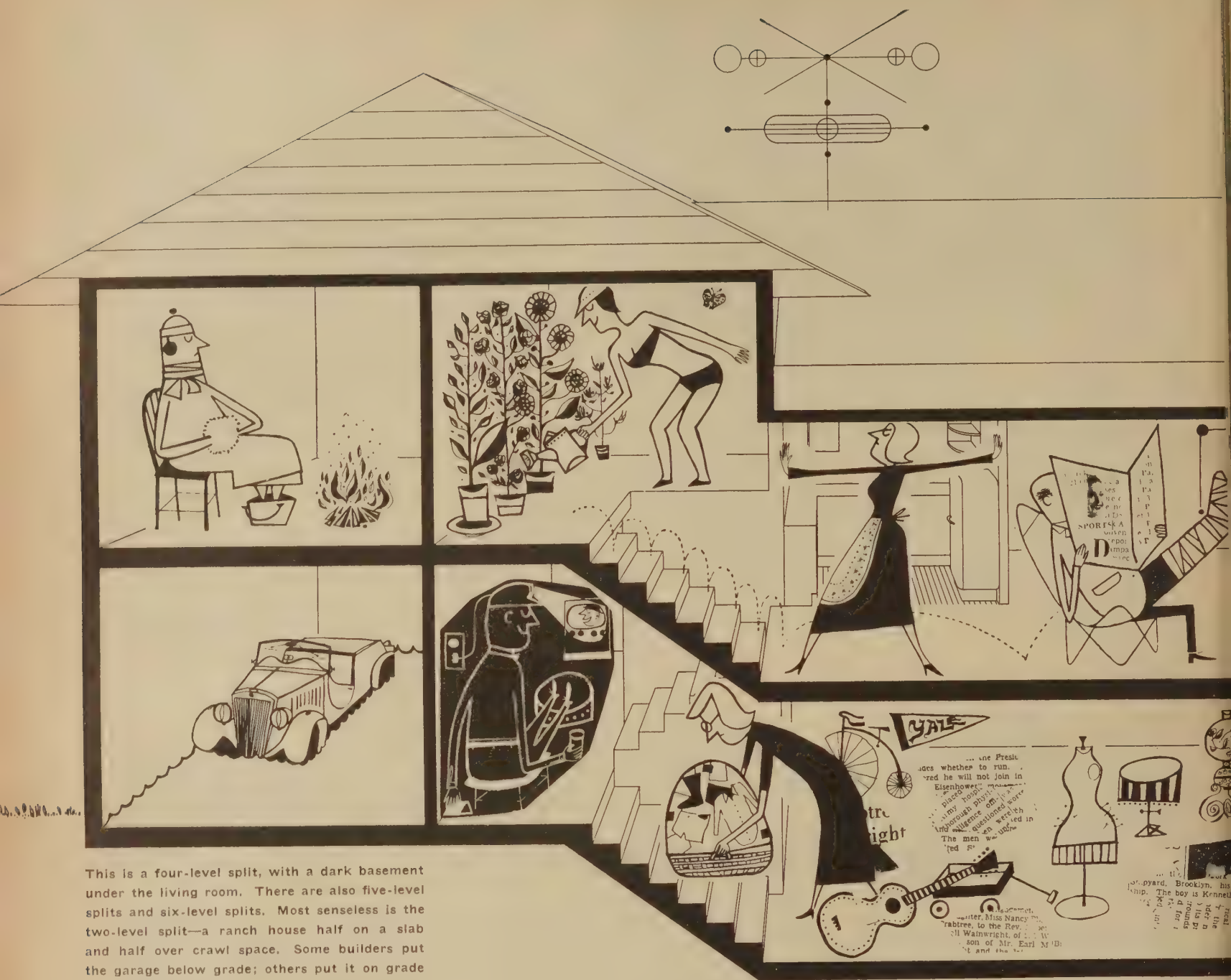
The continuous side split—a simpler roof line generally looks better.



The front-to-back split—often quite handsome, usually deep and narrow, with living room on the middle level and recreation room below.



The hillside split—to take advantage of gently sloping ground. There are also side-to-side hillside splits.



This is a four-level split, with a dark basement under the living room. There are also five-level splits and six-level splits. Most senseless is the two-level split—a ranch house half on a slab and half over crawl space. Some builders put the garage below grade; others put it on grade and bulldoze a bank under the middle level.

Nobody said much about economy

—proving again that economy is not a major factor in the split level boom.

Some builders say the split is economical only on ground that slopes too much for a ranch house and too little for a true hillside house. Others say the split is economical only on flat ground, to take advantage of stem walls that have to go down 3', anyhow. But buyers buy them either way.

What people don't like about splits . . .

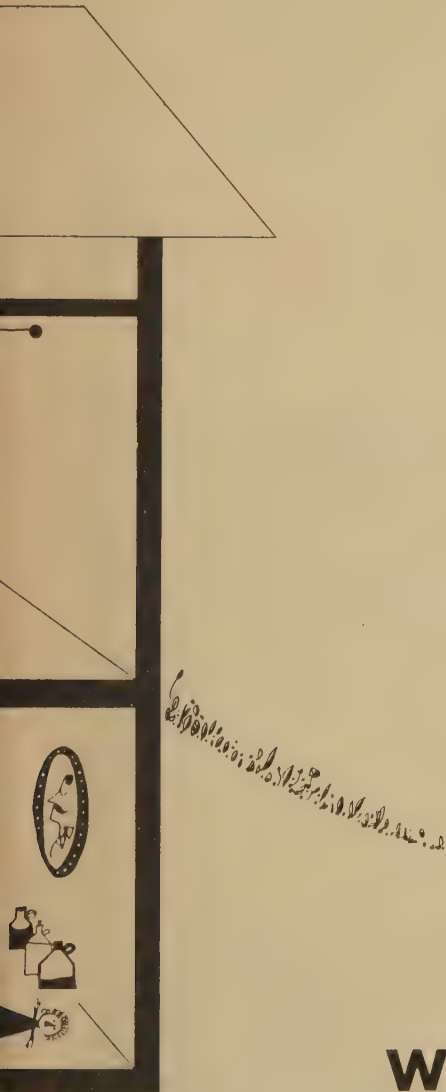
The drawing visualizes the most frequent complaints registered when HOUSE & HOME made a door-to-door canvass to talk to the owners of many splits in different tracts.

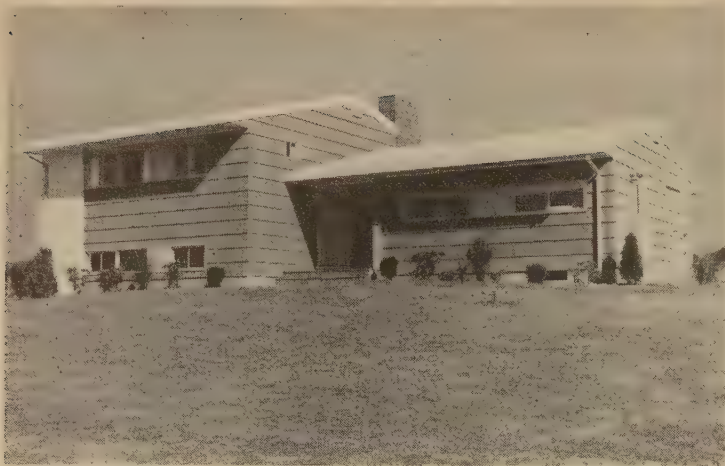
1. "It's so ugly!" Chopped rooflines and awkward elevations mark the split level streetscape.
2. "We have trouble with water and drainage." Water stands in yards, runs into garage, seeps into basement, said 50% of owners. Planting and cutting grass are difficult on mounds surrounding house.
3. "We don't use our recreation room." This is especially true when it is long and narrow, as it has to be in a small split. Often it is only half of a two-car garage, no more pleasant than the old basement "playroom." People don't want to go down to a dark room to play games or drink.
4. "The floor of our recreation room is cold—so cold the children don't want to play there." Many families try carpeting. One family bought hassocks for each member of the family, so that they could keep their feet high and warm above the recreation room floor.
5. "The bedroom over the garage is cold." Unheated garage drains heat from the bedroom above.
6. "Stairs are troublesome." They are often too steep in order to save space when splits are small. Too many levels confuse the stair climber too. Some splits have five or six levels.
7. "Our heating system isn't well balanced." Recreation room is chilly, bedrooms fiercely hot (except over garage).
8. "The kitchen is too far from recreation room and patio for easy serving of food to either." One owner installed a complete "summer kitchen" off the recreation room.
9. "The one or two steps into the sunken living room are dangerous." Many owners report these caused accidents.

But 90% would buy another split.

What people do like . . .

1. "It is so spacious." The second living room and more open planning appealed strongly to former apartment dwellers and former ranch house owners.
2. "Our bedrooms are wonderfully private." The half-level-higher bedrooms seem to be much more remote from the noise and traffic of the rest of the house than in a one-story house. Window peepers would have a difficult job.
3. "The short stair runs are much easier than stairs in a two-story house." Here are the advantages of the two-story house without the long stairs to climb.
4. "They look larger outside." Owners feel they look more substantial than the ranch house, and have greater prestige value.
5. "It's nice to have something new." The few who feel this way will probably not affect the future of the split.





1. Make the two halves fit together harmoniously.

This is no easy task. In the house at left, Architect Morris Lapidus has used the same materials throughout the house, and closely related roofs. Notice how quiet the lines are, as a result of avoiding architectural tricks. Unnecessary corners and roof breaks cost more, can agonize the facades.

Dearborn-Massar



2. Continue the roof of the higher portion of the house over the lower. Architect Paul Kirk here proves that one continuous line is much more peaceful than two unrelated ones. The roof gives the house an informal and domestic feeling. And it is easier to frame and flash. Interiors are spacious because ceilings follow the roof. Tie beams are not necessary because thrust of roof is taken by full-height interior partitions.



3. The offset split is one way to achieve a good relationship between the two masses. Architects E. & A. Kramer have emphasized the two halves in this offset plan. Only the masses are allowed to contrast: the materials are sensibly carried around the house. In this house a two-car garage is possible without sacrificing the recreation room (which is behind the garage).

Dimitri Wolkonski



4. Use a front-to-back split. This example, planned by Designer D. S. Oman shows some of the advantages. It has a simple gable roof. This design permits better elevations, lighter and airier recreation rooms. Many builders think this is a better kind of split: that more of these will be built than any other type. (See also the house by Architect Hugh Stubbins Jr., p. 153.)

How to make your split level look better

A cardinal rule for designing split-level houses

The multilevel house is not economically feasible when it has less than 1,600 sq. ft. plus inside garage. Some builders may question such an arbitrary figure, but based on the experience of eastern builders it serves as a minimum. The 1,600 sq. ft. figure takes into account:

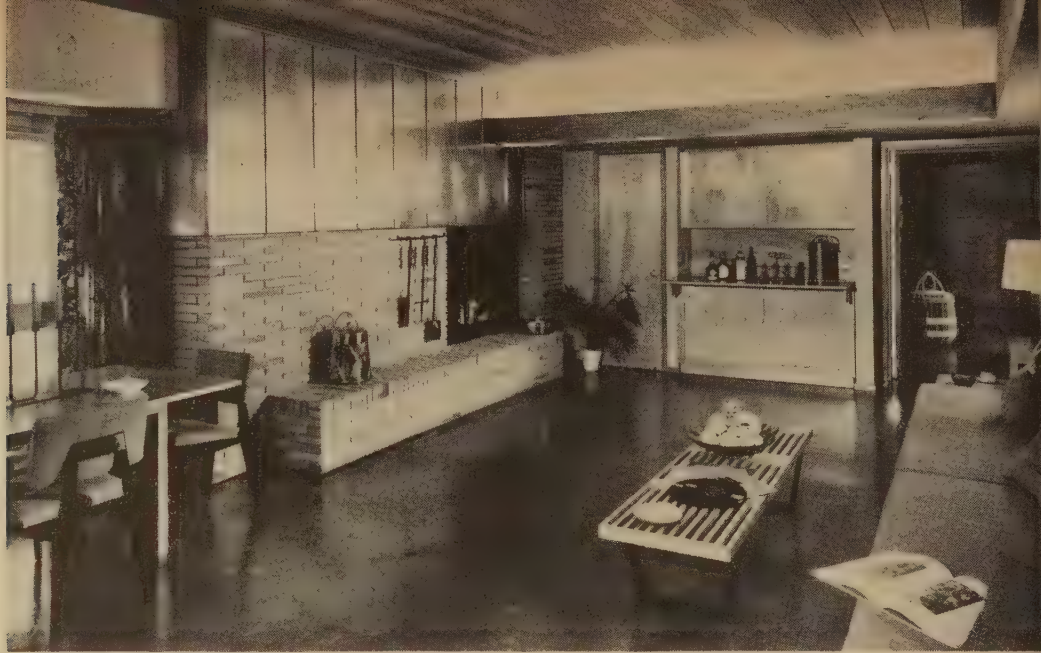
1. Split-level stairs gobble up too much space in relation to the total area if it is less than 1,600 sq. ft.
2. The house can hardly look well when smaller than that. It is already complicated by the split levels, and must have some long lines to relieve the high, complicated masses.

Hire a good architect

No question about it—the split-level house is a knotty problem in design. These houses require the hand of a skillful architect. Buyers want better design, as HOUSE & HOME's survey showed. Builders can hardly afford to be satisfied with hasty or expedient solutions.

Architect Bertram Lee Whinston's 2,451 sq. ft. offset split shows the advantage of size in design





Edgar Tafel, architect

How to make your split level work better

To solve the stairs problem

Keep steps within the "preferred angle range" (30 to 35° from horizontal). Make them broad enough for two people. And certainly finish them well, so they don't look like the old basement stairs. Note: these provisions can be made without difficulty in a split of over 1,600 sq. ft.



Donald Olsen, architect

*Photos: Lionel Freedman;
Ben Schnall; Rondal Partridge;
Robert C. Lautman*

To make the recreation room usable

Place it at the back of the house or on the low side, where it can have large windows and doors opening onto a terrace. Make it a bright and cheerful room, inviting both by day and by night.



Leo L. Fischer, architect

A long, narrow recreation room lends itself to few recreations, and is not very pleasant to be in. Along with good proportions, give your split-level recreation room some extras. People like a lavatory in this area for guests and for the children coming in from play. Many buyers want fireplaces in the recreation room, and many would like to have some cooking facilities there.

To balance the heating system

1. Provide adequate heat on the lower levels.
2. Have zone control on each level.
3. Prevent hot air from rising to bedrooms by using a large return (for warm-air systems).

To keep the recreation room warm

1. Insulate and waterproof stem walls and wall between recreation room and garage.
2. Use effective vapor barrier under the slab.
3. Install perimeter heating under the floor.

Make the kitchen big enough. This is possible only if the house is big enough. It is quite impossible in a minimum split, where the living-kitchen area may be only 20' x 20'.

Put the kitchen in the inside corner. It will be handy to the recreation room and accessible to the stairs to the garage. Have a pass-through window to the recreation area so the mother can watch the children and serve meals or snacks there on occasion.

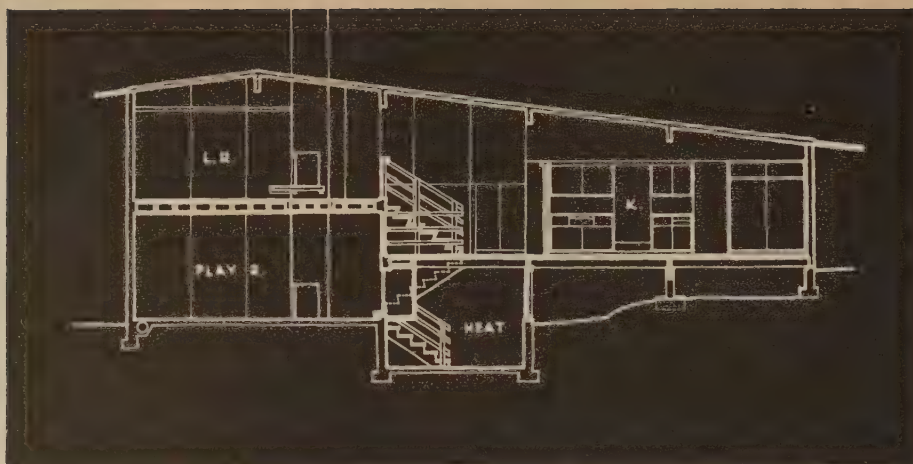


Leo L. Fischer, architect



Charles M. Goodman & Associates, architects

Have a good patio off the recreation room. Some builders offer the patio as an optional extra, which buyers usually take advantage of. With a good outdoor terrace, the recreation room becomes much more usable in the summer months. A flagstone terrace or a concrete slab need not cost much, can give a house a distinct advantage over one not having either. On usual builders' lots the patio will have more privacy at the back than at the side, as in the house above.

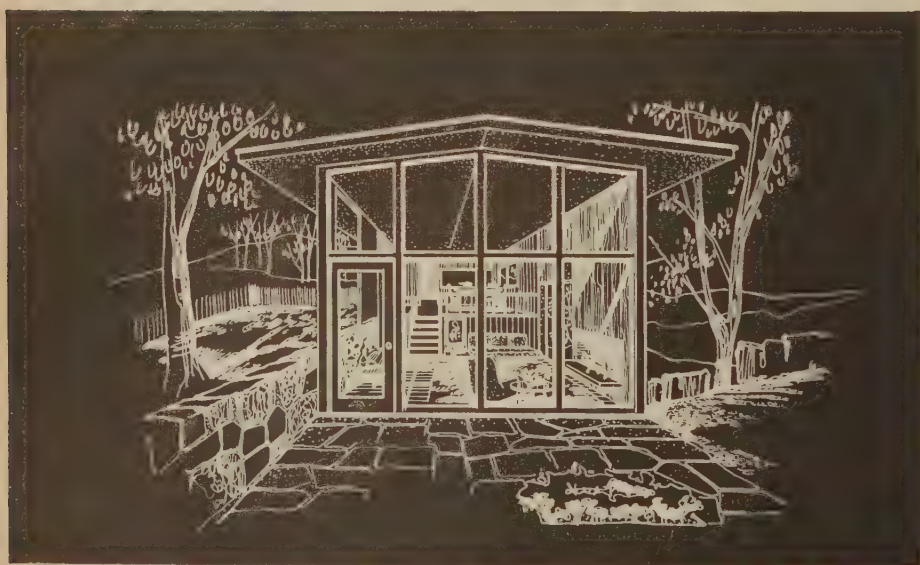


Architect: Paul H. Kirk

Separate living area for children allows parents complete privacy on their own floor. Only common area is the dining room and kitchen, which opens into the children's living room for supervision of play. Sliding panels close off these areas when greater privacy is required by the adults. Kitchen is well located for serving food to playroom and for outdoor dining. Perimeter heating and large glass areas make the playroom comfortable and cheerful. Laundry location gives access to drying yard.

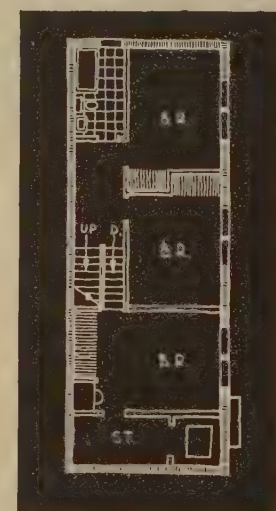
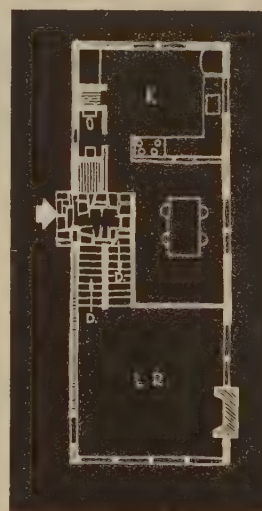


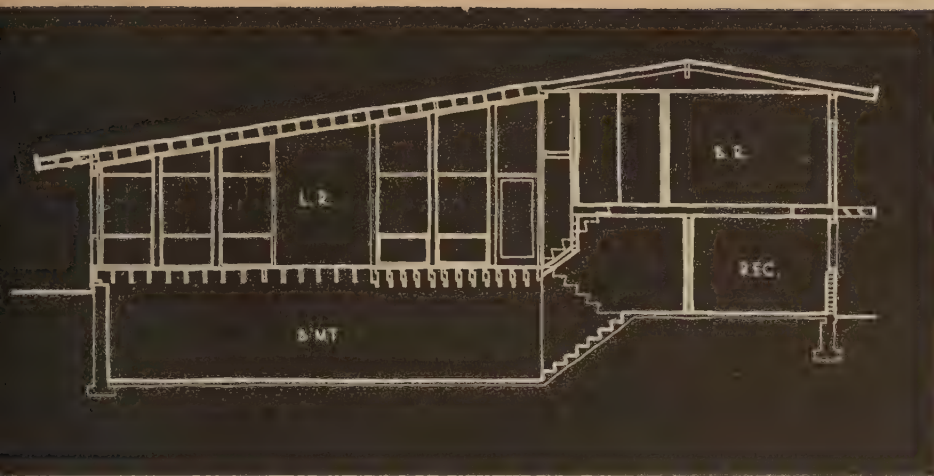
New variations on



Architects: Alpers & Berliner

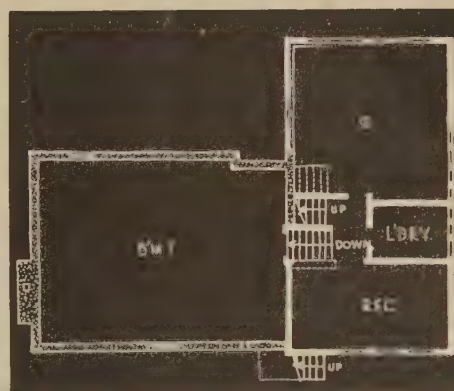
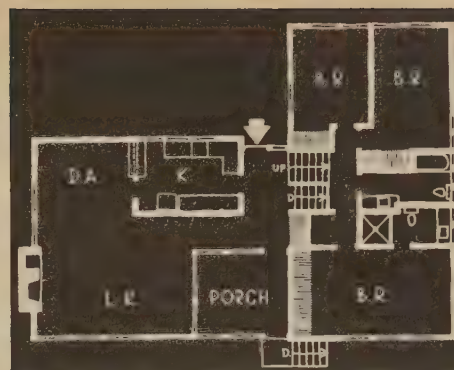
Bedrooms on lower level make this an unusual plan. While there is no recreation room, the large dining room and kitchen tend to take its place. By using a simple gable roof over the entire house, and allowing the ceilings to follow the roof, the living room becomes a spacious story-and-one-half high. Although lowest bedroom has drawn criticism for being dark and too far removed from bath, having the bedrooms below is an interesting possibility. Good-sized kitchen would appeal to many women. Despite certain faults in the plan, house has remarkably clean lines and several new ideas.



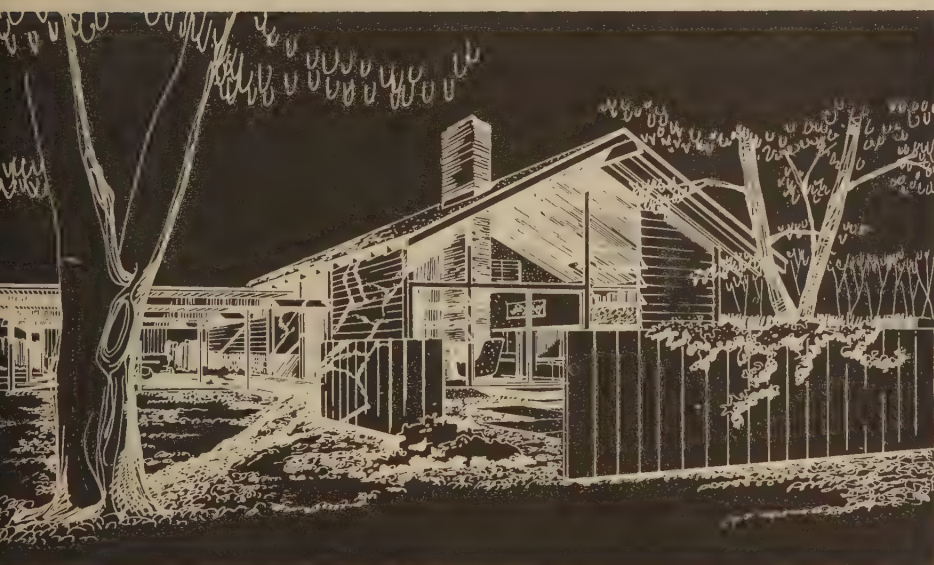


Architects: Edwin & Allen Kramer

Built-in porch was chosen by many buyers when offered optionally, even though it subtracted expensive space from the living room. Although section is similar to Kirk house (opposite), plan is very different, showing how different splits can be. Some observers feel that the large basement is unnecessary with the laundry beside the recreation room. Actually the deeper excavation required defeats the original economy of the split, which should take advantage of the 3' foundation walls for the lower level. Just the same, this is a good looking split-level house. (See photo, p. 148)

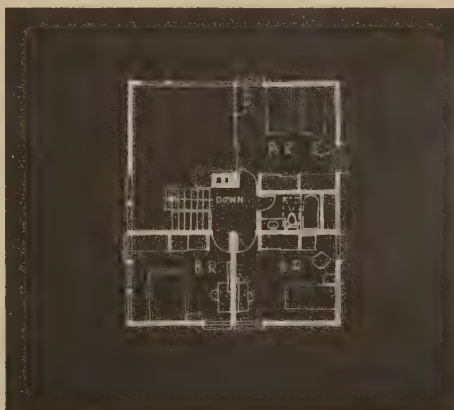
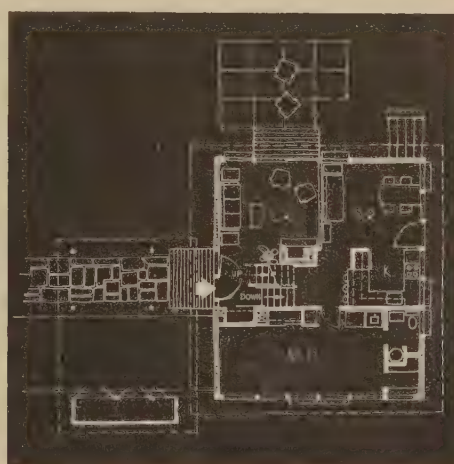


the split-level idea



Architect: Hugh Stubbins Jr.

Small living room of this house gains spaciousness from its tall ceiling, (12') and by opening into lower dining area. Master bedroom above has sliding panels opening to living room, resulting in a balcony effect. Recreation room connecting with the kitchen allows convenient serving for parties. Significant difference in this plan is the detached carport. Many owners prefer a carport, permitting the more expensive space in the house proper to be used as living area. Exterior has a charming simplicity, should appeal to buyers who do not want extreme design.



But, before you switch to splits, consider...

Robert Lautman



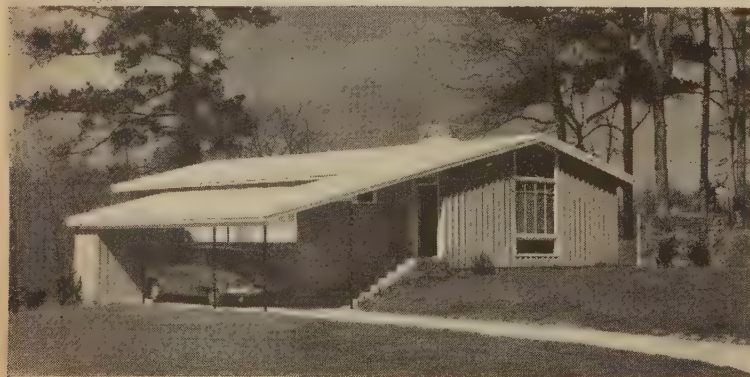
... the advantages of a hillside house if your land is sloping. House at left is good looking because of its continuous floor levels and roof. Built by Luria Bros., the architects were Keyes, Smith & Satterlee, Francis D. Lethbridge, associate. Another builder tried splits in Philadelphia, switched back to hillside houses when he discovered he could not make a profit.

© Ezra Stoller



... a two-story house which can be built with the entrance halfway between floors to minimize stair-climbing. Some houses are turning up with two-story wings instead of split levels. Many builders think there is a trend toward the two-story house. Split-level builders who have built two-story houses might heave a hopeful sigh. Probably they remember best the clean-cut construction methods. Designer: Cyril Farny (see p. 156).

Gabriel Benyur



... a better one-story house with many of the advantages of the split. These can be introduced into the ranch house through skillful planning, and the advantages of one-story living are obvious. There are no stairs to climb and grading is easier. Bedrooms can be made more private; a good recreation room can be provided on grade. Architects, Finch & Barnes; builders, Northcutt & Sanders.





Manfred

Are split levels here to stay?

We think split levels are too well imbedded in the builder's book to pass over as a fad. But less than ten years ago many people said that they would never climb stairs again. The split could fade fast.

The long-range answer; suit the house type to circumstances. For example, the one-story house makes good sense in Florida and Phoenix. A mixture of houses adds variety and personality to a development. A two-story house next to a one-story house tends to make an interesting streetscape, handled properly. The split might fit best into such a scheme, where it is not one of many, all alike.



Better planned than most splits,

this two-story house looks long and low

After the war it seemed that stair climbing was on the way out. Two-story houses gave way to the demand for one-story living and low elevations. But buyers have begun to find that a one-story house large enough to be livable stretches out enough to be expensive. So in many areas there is a trend toward splits and hillside designs and even to two-story houses. The smash hit success of the split (p. 144) shows that climbing stairs is not such a bugaboo after all. On these pages is an interesting new variation of the two-story house that packs a lot of livability and year-round comfort into its 1,920 sq. ft.

Last year when Carl Koch introduced his Techbuilt prefab, its widespread publicity (H&H, Feb. '54) helped to bring him many dealers. In addition some builders who thought his two-story house made sense adapted his theories to their own needs. Among them was Cyril Farny of Morris Plains, N. J., who has opened a 500-acre development with a two-story house with the lines of a one-story house. Where Koch's Techbuilt is 3½' below grade level along one side, Farny's High Country house is 4' below grade along two sides. Above ground this house is 1½' higher than the Techbuilt. Farny made many other changes, as shown in the photographs on these pages.

"I wanted a close indoor-outdoor relationship achieved by large areas of movable, insulated plate glass," Farny explains. "But I did not want to break too much with tradition and scare the people who play safe by asking for colonial or some adaptation of it." Both ends of the house are open from slab to roof, and sliding doors permit breezes to pass straight through the house on hot summer days. For colder weather, a \$2,500 high-pressure steam heating system provides zoned heat for each room. Cost of house: \$39,500, plus about \$6,000 for one-acre lot.



Photos: © Ezra Stoller



Low appearance of the Farny house as seen from south side (looking uphill) is partly due to fact that house sits 4' below grade level lengthwise, partly because wide eave extends over the long front porch. This side is faced by old brick; others have cedar clapboard siding. House is 24' wide and 40' long. Screened porch at right is 10' x 24'. Along eaves is special gutter which cannot be seen from below.

Front porch extends length of house, almost to garage. Short walk from porch to garage is covered. Sliding front door and the windows are hung from top and double weather-stripped. Objection might be made to heavy brick porch columns; rough hewn wood columns might better have been used along full length. Later Farny houses will not be exact copies of this first one.

**This two-story house
attempts to strike a balance
between contemporary design
and 'traditional country living'**

In some respects, Farny's custom house is a transition house because he hopes to improve on several of its details when he builds more houses this year. As he points out, it combines old and new materials and ideas in a way that "Thomas Jefferson himself would like." Farny does not hesitate to use old brick and aluminum side by side. He uses much glass, yet his house is as well protected against cold as many tiny-windowed houses of earlier days. The High Country house, Farny believes, will suit the needs of people who want a comfortable home suited to demands of climate, topography and traditional country living. He has borrowed freely from Architect Koch's Techbuilt plans but more often than not has modified what he studied.

Included in the \$39,500 price of this 1,920 sq. ft. house are \$2,000 of landscaping, a \$2,500 heating plant, a kitchen full of appliances, plus a large two-car garage with a rear room usable as a workshop. Additional cost of the improved land will average \$6,000 an acre. All lots are on high hilly land about an hour's drive from New York City.



Porch, off kitchen and dining room, at south end of house, has brick-paved floor 4' below grade level. Porch is one of five outdoor living areas and is particularly suited for small children whom mother can watch through wide windows and glass doors. Top soil of sloping lawn above is laid on gravel base, thus on even the rainiest days soaks up water before it reaches porch. Crossbeam under roof would seem to obstruct view from upper windows.



Dining room is large and well lighted. Sliding insulated door (left) opens to sunken porch. Kitchen may be entered from either end of the wall between it and dining room. In kitchen can be seen unusual double-glazed electrically operated window which can be lowered and replaced by bronze screen. The screen unrolls from top as glass plate disappears below into wall behind sink. Window operates by motor installed in unit at its top.



Screens need not be unsightly, Farny says, and proves his point with 8' high, 24' wide screen extending across wide porch at north end of house. It has no vertical or horizontal supporting pieces to obstruct view. This screen and those at sides of porch are held taut by heavy metal weights to which they are clamped at bottom. Upstairs sun deck off master bedroom is copied from Koch design which was more successful.



Living room of Farny house is separated from screened porch and patio beyond solely by one wide window and sliding door. These areas are tied together visually by cedar plank ceiling. Fireplace below is exact copy of Koch design. Small panel doors center, below open to bar which also can serve as projection room or temporary workshop. A folding door makes a guest room of half of living room but still leaves access to outdoors.





Lumber Dealer Charles Wagner says, "We're not out of the woods till our products are used the best way they can be used."

To meet prefab package competition

This lumber dealer

Indiana's biggest lumber merchant has decided the answer to the out-of-town prefabricator's package is to tie a local architect's service into his own package.

The plan is working and—more significant—it is working smack in the heart of prefab country—Indianapolis. The dealer who worked it out, Charles Wagner, president of Burnet-Binford Lumber Co., says: "We found some of our best customers starting to buy panels and prefab packages. We knew they weren't getting their materials any cheaper—no one can beat our price—so we reasoned that builders wanted to buy an idea as well as materials. The idea was design. We were forced into design defensively." B-B now merchandises the plans of two architects, Dick Bishop and Fran Schroeder, one with traditional plans, the second with contemporary.

Says Wagner, "Everybody in the building industry can advertise his services or wares. Architects can't be hard-nosed about selling. We can. Merchandising is our business. We sell their plans on an installment basis."

Builders who buy from B-B get plans, precut lumber or panels and millwork at a package price. Cost of plans: \$100 each. Greatest strength of this plan: it uses local architects, "who know the local market—a plan service is definitely not the answer."

Lumberman Wagner has little doubt about the lumber dealer's place in building. With a major millwork plant but no retail store (75% of the company's business is with builders), no land development scheme ("Our business is being a good lumber merchant") nor a financing plan ("Mortgage brokers can do their business better than we can"), B-B is dedicated to the small builder ("A fellow isn't stupid because he's small").



To excite imagination of builders before they ever saw one of his houses, Schroeder had miniature scale models built, now shows prospects the models or professional photographs of them. "We had something to sell," says he, "but we had to educate builders to want what we had to sell. The models or photographs do something that flat elevations or renderings can't do for the builder." Fencing details, exact colors on models display Schroeder's design ideas, site planning, merchandising skill.

Photos: J. Bell Laboratories; Fran E. Schroeder & Associates, architect



sells his architect

and designs like these



Architect Fran Schroeder has waged an almost single-handed struggle to get up-to-date design in merchant-built houses in Indianapolis. His payoff: out-of-town as well as local builders are now engaging him. The lumber dealer has no exclusive on his design. Several builders have tried to copy Schroeder's plans.





Woman builder, Mrs. Ted Marbaugh "can't see sense in putting money in a house in 1954 that was designed for 1930," uses full architectural services. Architect Schroeder made a believer out of me," says she. Now building 20 houses a year, she hopes to step up to 35, "no more."



All-brick house with three bedrooms and attached or detached carport with storage shed, sells for \$14,675. After slow start, builder switched to sales agent sold on modern, commissioned Schroeder to do third block of nine houses.

Designs like these at \$100 a house

**boost sales for architect, builders
and lumber dealer, alike**



BEFORE

Streetscape of earlier houses Mrs. Marbaugh built before she retained Schroeder to do her site planning presented a hodgepodge of false gables, varied roof pitches and elevations, "lacked organization,"



AFTER

Once architect sold her on siting as well as on house design, Builder Marbaugh's streetscape took on smoother rhythm from low pitches of roofs, got variation from color, fences, shifts in house orientations.

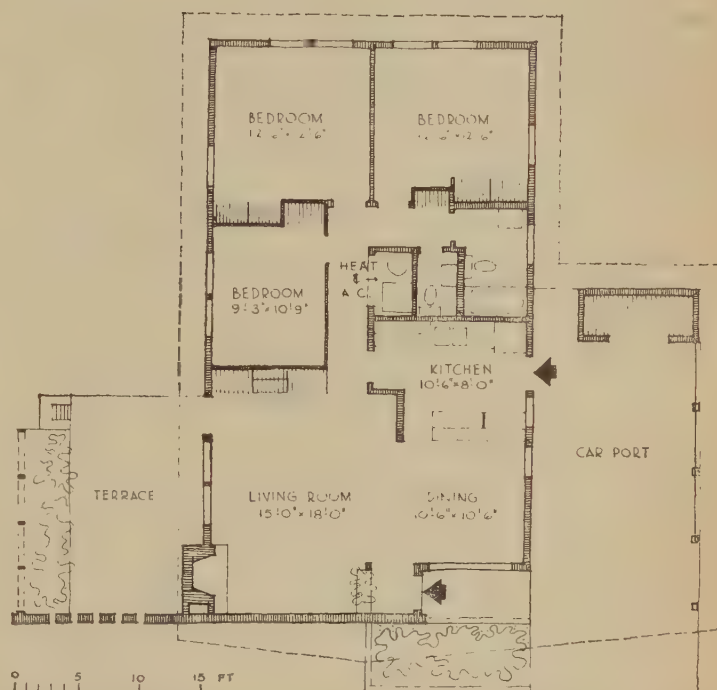


Wirsching orients his living room to side where window wall and door open to paved patio. House was sold before completion; sale was helped by architect's miniature model. Since then 20 more like it were sold.

House and three more like it were sold before roof was on. It serves as the model for 20 houses Wirsching will build on a tract with two other builders who take alternate lots around him. Wirsching never thought prefabrication was a threat until recently: "too many of them lacked good design and sound variation," but believes he gets best shake from lumber dealer over the long pull: "B-B is local and I can get all sorts of flexibility from the architect or lumber dealer." Examples: substitution of brick wall for a panel, shifting closets, open ceilings. From the lumber dealer he also gets pre-cut lumber, panels, design and a package price. "Prefabers can't beat it," says he.



Bob Wirsching, Purdue graduate engineer, started business in 1946 on \$1 600 capital. Though progressive, he has kept his business small (normally he does 20 houses a year) because he likes to have time to hunt and fish. He uses plastic vapor barrier, has tied in with an air-conditioning manufacturer on promotion, is sold on building with panels.





Circular living room, 26' in diameter, has a cone-shaped ceiling sprayed with sound-absorbing plaster. Plastic skylight forms apex of cone; smaller, square skylights are spotted around its surface. This is the principal high-ceiling area in the house—appropriately so because this is the principal

room. Approaches to it are under 7' high, natural wood ceilings more closely related to human scale, and, incidentally, to the height of stock doors. Window seat (barely visible at right) has low ceiling above it to suggest greater intimacy. Floor is a pebble surface, integral with the slab.

LOCATION: Princeton, N. J.

KENNETH KASSLER, architect

L. C. BOWERS & SONS, general contractor

NORMAN SOLLENBERGER, engineer for concrete cone

KRAEMER LUKS, heating engineer

DON WHEELER (Union Bag & Paper Co.), research on honeycomb core



South side of house faces garden. Plastic skylight at apex of living room cone is surrounded by ring of small electric bulbs which create charming starlight effects at night. Note low (7') roof line around perimeter of house—an effort to achieve a human scale at entrances.

Three experiments in one house . . .

an experiment in space

an experiment in structure

and an experiment in materials

Too often good architects have to try out their most daring new ideas on their own homes, as Architect Kenneth Kassler did in his new concrete house at Princeton N. J.

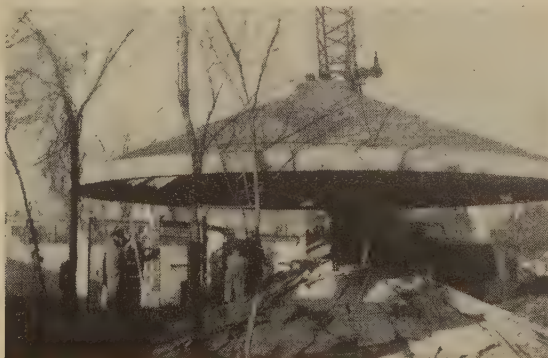
His house is interesting in several respects, and *particularly* interesting in three:

First, as an experiment in the use of space. Kassler develops his interior spaces much in the manner of Frank Lloyd Wright—i.e. he shapes them by changing floor and ceiling levels, not by walls and screens alone. Second, this house is a fascinating experiment in the use of concrete. The cone-shaped roof over the circular living room was cast on the ground (and formed on a pile of earth), then lifted up by a crane and placed on the walls. And, third, this house contains some advanced experiments with plastic windows—each consisting of two or three skins of transparent plastic separated by a paper honeycomb.

For details on these three points and others, please turn the page.



Experiment in space includes a 26' diameter circular living room (see also large photograph).



Experiment in structure includes concrete cone, poured on the ground and lifted into place (see p. 168).



Experiment in materials includes new plastic window. (see p. 169).



1



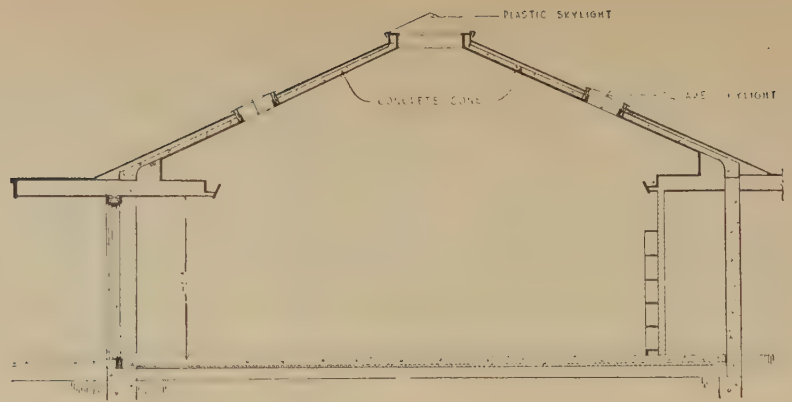
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3



4



Section through living room shows 2½" thick concrete cone in place. The structural design for the cone was done by Engineer Norman Sollenberger.

Concrete cone was cast on the ground

The 26' diameter concrete cone that forms the roof over Architect Kassler's living room is an experiment in thin-shell construction.

Here is how the cone was built:

First, a form was made of earth, topped off with mortar (1). Next, the reinforcing rods were placed across the form, openings for skylights were roughed in, and the concrete was poured over the mold (2). When it had hardened, a small crane was moved into position, cables were attached to bolts set in concrete, and the cone was lifted off the ground (3). Its total weight: about 25,000 lb. Its thickness: *only 2½"*. If the same roof had been built of an ordinary, flat concrete slab, the weight would have been doubled. Next, the crane deposited its load on block walls and piers (4). Finally the outside surface of the cone was finished off with insulation and roofing, and the inside surface was sprayed with asbestos plaster. Plastic skylights completed the structure (see below).





Two types of plastic windows, seen head-on above. At left, a standard sandwich; at right, a "triple-decker" with translucent plastic in the middle, two types of honeycomb. Seen at an angle (below), window offers privacy, reduces glare, presents decorative patterns. Right: honeycomb units used in a sliding door.



Plastic window is decorative, breaks up the light

All the windows in this house were specially made by Kassler of a plastic and paper honeycomb sandwich: the exterior skins are of a transparent methyl methacrylate; the core is of paper honeycomb in different patterns. Some window sandwiches have two layers of plastic, one layer of honeycomb. Others have three layers (the central one is sometimes translucent only) and two of honeycomb—with two different patterns made to overlap for special effects.

These windows are better insulators than equivalent double or triple glazing units. They also have further advantages: first, sky glare is reduced by the paper honeycomb; second, there is a degree of privacy—people cannot look into the house at an angle; and, third, the windows have a decorative quality similar to that of a grille which breaks up the light, casts patterned shadows, and suggests changing degrees of transparency as you look through it from different angles. All windows lift out of their frames to turn rooms into breezeways if desired.

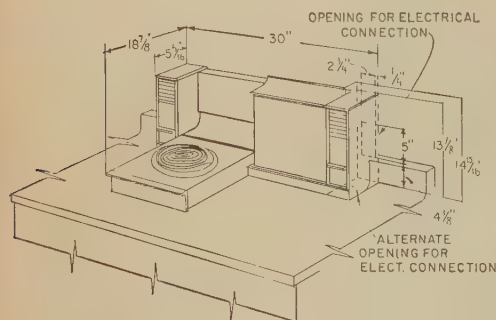


NEW PRODUCTS

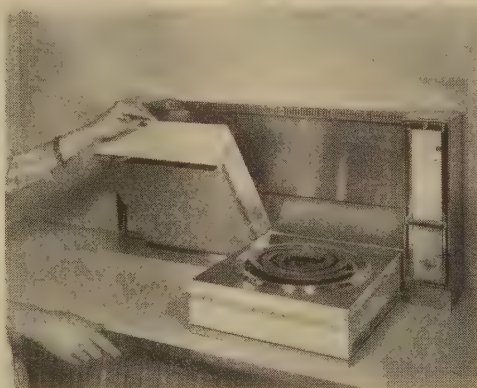
A disappearing range and a built-in refrigerator



Freed counter space is immediately usable when cooking units tilt back. Center opening oven doors are new.



Electrical connection may be made from bottom or back. Ladder-like side control adjusts temperatures.



Cooking space converts instantly into extra work surface with Frigidaire's new surface units that rest on the counter top when in use, and fold up into a wall panel when not needed, leaving the counter unobstructed.

Each stainless-steel section contains one 6" and one 8" heating element, controlled by a sliding indicator handle on the back panel. When folded away, the units switch off automatically, and a baffle at the top of the panel diverts residual heat from the wall. Units may be mounted side-by-side or separated, and any combination of burners can be in use or folded away.

Companion to the dual cooking units is the built-in wall oven, with its center-opening "French doors." Controls and switches are located high out of reach of children. Dimensions: 17" wide, 18" high, and 20 1/2" deep.

Price: cooking units, \$86; oven, \$182.95

Feature of Hotpoint's built-in line of kitchen appliances is their brushed-chrome finished refrigerator, which comes complete with a matching frame, ready to be built into a wall opening. A grille at the top of the frame serves as a heat exhaust vent.

Price: 11.5 cu. ft., \$599.95; frame, \$49.95

Manufacturers: Frigidaire Div.
General Motors Corp., Dayton, Ohio
Hotpoint, Inc.
5600 W. Taylor St., Chicago 44, Ill.

Other NEW PRODUCTS in this issue



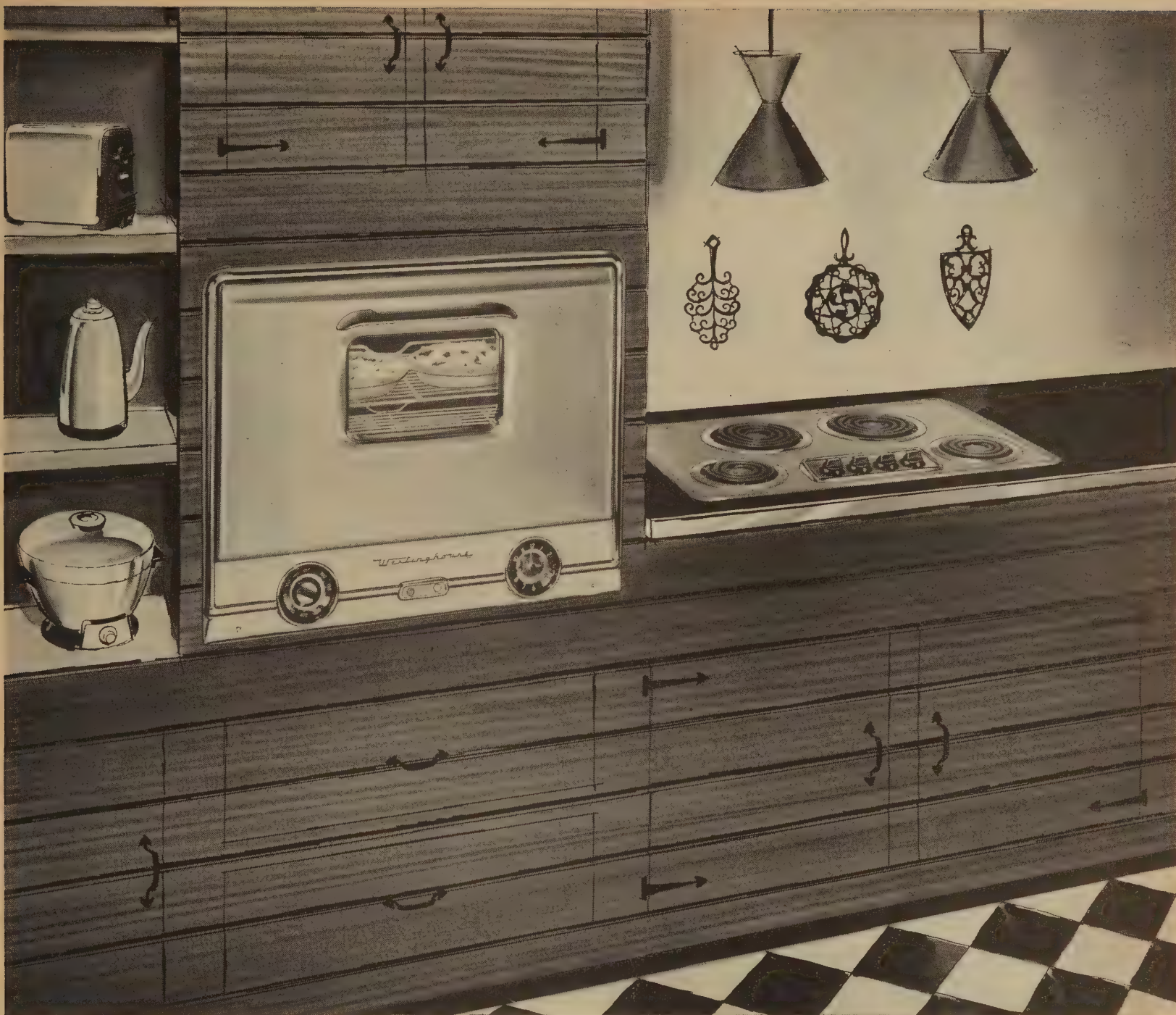
quartz heating element...p. 186



reflecting roof paint...p. 212



newly styled hardware...p. 202



It's here! The bigger oven you asked for in this new **Westinghouse Built-in Range**

"Give us a really big oven—that's what our customers are demanding . . . we need a built-in range with deluxe features," so builders told us.

Both needs are fully met in this brand-new Westinghouse DeLuxe Built-in Electric Range. Easy to install, this advanced combination offers a new concept in range design.

The king-sized Miracle Sealed Oven—a full 24" inside width—is a selling high light with its rich satin chrome exterior and Look-in Door. Deluxe features include Electric Clock, Automatic Oven Timer and Minute Timer; Oven Light; and Single Dial Oven Control.

The stainless-steel cooking platform features four Plug-in Units, including

the high-speed Super Corox Unit, and Color-Glance Controls on a convenient, slanting panel for easier visibility.

For complete details, contact your distributor or write direct.

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Betty Furness says: Homemakers will delight in the deluxe features and the spacious oven that will roast 2 big turkeys, bake 10 loaves of bread or 6 pies . . . yet cook the smallest meal to perfection.



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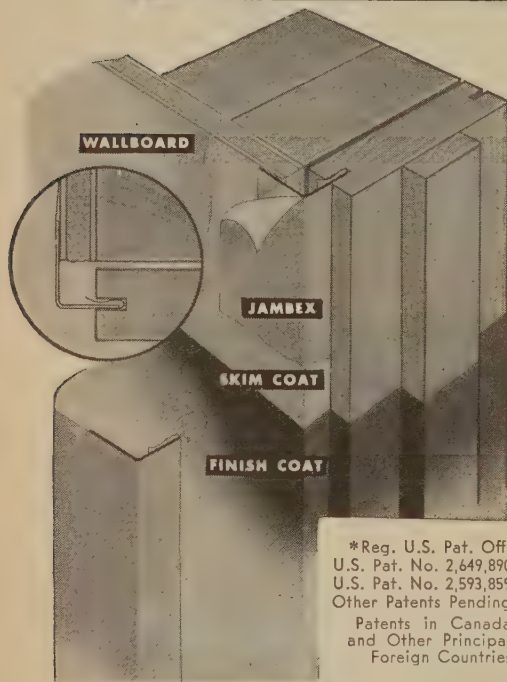
BEADEx is the only corner protection, backed by the manufacturer's written guarantee, which will maintain crack-free corners in drywall construction for the life of the wall.

Architects and builders can now furnish home owners with insurance against unsightly corners at no additional cost. In BEADEx reinforcement, trouble-making raw metal edges are sheathed with protective joint tape which is bonded to metal in a patented process. Corner-Rite embodies the BEADEx principles for inside corners.

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NEW PRODUCTS continued from p. 170

For further details, check numbered coupon, p. 234

THREE NEW GE DEVELOPMENTS: a shock-proof quartz infrared lamp; a glowing light switch; a lightweight cable

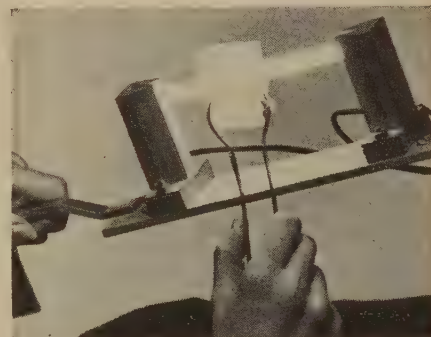
A tubular quartz cylinder, about the size and shape of a fat pencil, but producing 1,000 w. of energy, is the latest product of GE's



Cigarette ignites on contact with lamp

laboratory, and is now being evaluated by appliance manufacturers as a heat source for cooking, baking, heating or drying.

The tungsten filament, encased in the fused quartz body, operates at about 4,000° F., and



Resistance to thermal shock is shown by ice cube touched to heated unit. Cigarette (below) shows comparative size of 500 w. and 1,000 w. GE lamps.



releases 85% of its energy in the form of radiated heat, as against less than 50% for most materials, which will permit much faster cooking in some instances. Even when heated to full temperature, the tube can be immersed in cold water, or touched with an ice cube, without shattering from the thermal shock.

Space heaters and many appliances are seen as possibilities for the quartz lamp, as well as its cooking and baking applications. Because light, as well as heat, is produced by the

continued on p. 190

KEYBEAD

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Figure it any way you want—new Keybead is by far your best value in corner bead.

New Keybead nose is 23-gauge steel. No other standard corner bead provides such protection against shock. The reinforcing mesh flanges are tough and strong, make new Keybead very rigid, easy to true up. New Keybead is straight end to end—no waste. And the nose is double electro-galvanized against rust, including all edges.

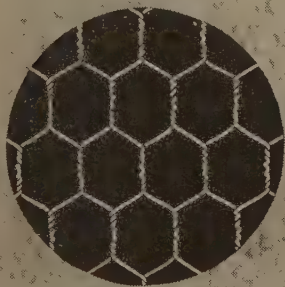
With Keybead you get a *solid corner*! A corner completely filled with plaster. The plaster flows through the open mesh flanges easily, completely embeds every wire . . . does not break the bond of plaster with the gypsum lath. Corner has reinforcement of heavy gauge steel wires running in every direction.

KEYBEAD IS FAR LOWER IN COST THAN ANY OTHER BEAD OF EQUAL WEIGHT!

Only Keybead is available in your choice of Galvanized or solid zinc nose. Use zinc outside, even in salty atmosphere. Use it inside where corrosion is a problem. For zinc nose—ask for "KEYZBEAD."

You do get more for your money with new Keybead. Ask for it by name!

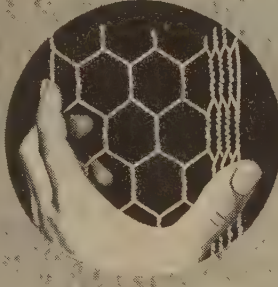
better yet... use all 3 keys to stronger plaster



1. Keymesh woven wire galvanized reinforcing lath—applied over the gypsum or insulating lath on the entire ceiling; for highest quality, over all walls, too. This network of multidirectional reinforcing increases strength; increases fire safety 50%. Keymesh assures a uniform thickness of plaster, and guards against cracks.



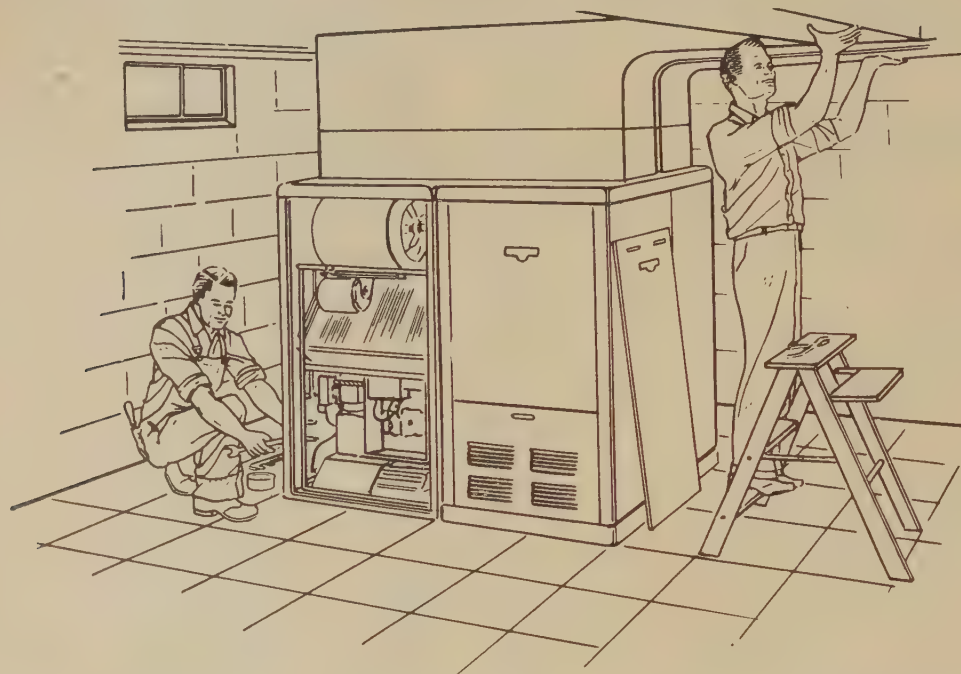
2. Keybead woven wire galvanized reinforcing lath with the precision-formed bead—applied at all outside corners—or zinc nose for outside applications. Open mesh of Keybead wings permits plaster to completely embed steel wires. Full, solid corners result. Available in standard lengths; easy to splice.



3. Keycorner preformed-for-corners, convenient width, woven wire galvanized reinforcing lath—applied at corners, joints and ceiling-wall junctures. Fits snugly in corners when you flex it. Lies flat, too, for stripping wherever required. Same multidirectional reinforcing as Keymesh for maximum crack resistance.



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Mail to **Armstrong Furnace Company**, 853 W. Third Ave.,
Columbus 8, Ohio or 1703 E. Euclid Ave., Des Moines 13, Iowa

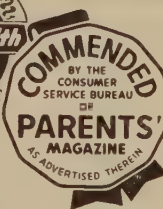
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but if it's real merchandising help I'll consider it.

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Company Name _____

Address _____

City _____ Zone _____ State _____



NEW PRODUCTS *continued from p. 186*

For further details, check numbered coupon, p. 234

lamp, shielding would be required in many applications. Samples of the units are available to manufacturers wishing to develop equipment utilizing infrared heat.

Price: 500 w., \$7; 1,000 w., \$8.50.

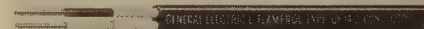
Manufacturer: General Electric Corp.
Nela Park
Cleveland 12, Ohio



d. From GE's Construction Materials Division comes a mercury switch that glows in the "off" position, and a plastic-coated cable that can be buried in the ground without conduit or lead covering.

The source of light in the toggle is a tiny neon light, and the glow makes it useful for locations such as children's rooms, long hallways, attics and basements, even bedrooms, if the switch location isn't directly facing the bed. Tests indicate that the light has a life expectancy of 10-15 years under normal conditions, and the current used would amount to less than 2¢ per year. Available in ivory.

Price: \$1.50



The rapid growth of indoor-outdoor living has brought a need for more extensive outdoor lighting, which ordinarily requires expensive conduit installation to handle the underground feeder cables. GE's *Flamenol* Type UF underground feeder cable has its conductors covered with a polyvinyl chloride plastic insulation unaffected by dampness, acids, etc., and needs no protection of conduit or lead sheathing when installed.

Its light weight (61 lb. per M. ft. in two-wire No. 14) makes it easy to handle and install, and the cable is furnished in one-, two- and three-conductor types, available in sizes from No. 4 to No. 14 wire.

Price: No. 14 wire, single conductor, \$26.80 per M. ft.; two conductor, \$57.50; three conductor, \$105.

Manufacturer: General Electric Corp.
1285 Boston Ave.
Bridgeport 2, Conn.

continued on p. 194



Two New Designs

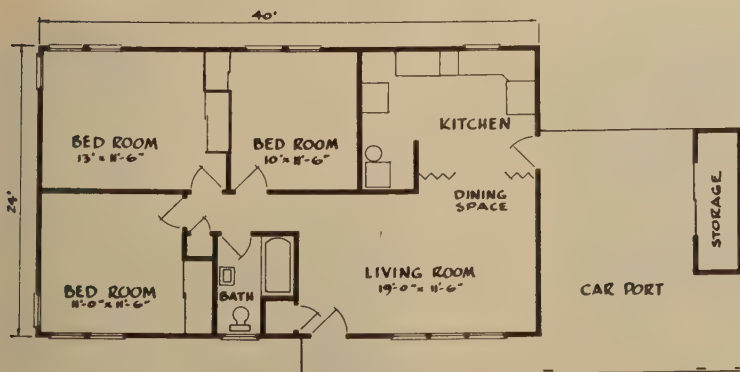


Architect designed and built to the exacting standards of time proven builder's methods, the Chatham and Dundee add two fresh new designs to the more than 50 already available to Permabilt dealers. The long lines, low pitched roof, and car port with garden tool storage wall of these modern packaged homes will add plenty of sales appeal for dealers. Permabilt homes arrive complete, ready for quick field erection. They are made from quality brand name materials, with exterior wall panels assembled, windows and doors installed and the structure completely weather-proofed. Permabilt's proven construction methods will find ready acceptance with any lending institution. All are eligible for FHA and VA insured mortgage loans under the latest Structural Engineering Bulletin.

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FOR BUILDERS

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QUICK ERECTION
EASY FINANCING



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Woodweaves BY Suncraft!



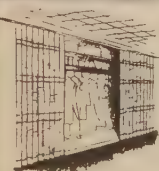
FOR LOW COST DOORS, ROOM DIVIDERS

Suncraft has gone to every corner of the world to select many new and exciting woodweaves for its many users... America's leading designers, builders and architects... those who recognize their value as doors, room dividers and drapes. Luxurious in appearance, they're amazingly durable and economical. Home selling value is astounding! Write Today!

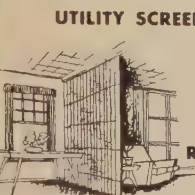
ABSTRACTS—PRESENTING BAMBOO DRAPERIES in their newest and most advanced form. Variation of design and color are limitless.

ROLLO WEAVE—Here is the tie between the traditional and modern—delicate in appearance, but rugged in use.

PLASTIC WEAVE—Combining the strength of plastic with pine gives an easily cleaned woodweave that affords privacy.



CLOSET DOORS



UTILITY SCREENS



ROOM DIVIDERS

Write today for more information,
early delivery on these
LOW COST MATERIALS!



Suncraft INC.

1317 W. Webster Ave. • Chicago 14, Ill.

NEW PRODUCTS *continued from p. 190*

For further details, check numbered coupon, p. 234



f. T-FRAME FOR POCKET DOORS bridges opening with steel header, has split jamb

Sliding doors add to the usable floor space in any room, and Sterling's T-Frame brings the blessing of prefabrication to the usually complicated opening needed for doors that slide into wall pockets. Into the rough stud wall opening, the builder merely nails or screws the steel header and split jamb, applies the finished wall, dry wall or plaster, then hangs the door on the overhead track.

The complete package includes in addition, an aluminum track, adjustable hangers with nylon rollers, bottom guide strips, rubber bumper and screws—everything but the door itself. Widths range from 2' to 3', for any 1 3/4" x 6'-8" door, and the entire assembly is packed in one carton.

Price: (in lots of 12) \$25-\$27, depending on width

Manufacturer: Sterling Hardware Mfg. Co.
2345 W. Nelson St.
Chicago 18, Ill.

g. TELEPHONE SEAT folds up into wall, needs no floor space, fits between 16" o.c. studs

One of the most common traffic blocks in houses is the side chair near the telephone location. A new built-in, the Telo-Seat, provides a pull-down seat for the phone user as



well as niches for directory and the instrument itself, all combined in a prebuilt unit that fits between standard studs.

The padded seat pulls down and is supported by an automatically locking leg, folds

continued on p. 198

There's no better wood siding than

Harborite ...here's why:

Harborite is plastic-faced SUPER-Harbor—the original boat hull plywood that has gone into thousands of pleasure, work and fighting boats. Harborite is a premium grade builders' product that weathers like glass, does away with paint checking, takes advantages of plywood's tremendous strength, and exceeds standard building requirements. It costs less than conventional siding materials, adds strength, beauty and value to any home.

Harborite

is much more than "just plywood"

...and the difference is in the construction of the panel. Harborite is a premium grade plywood, manufactured with extreme care to assure highest quality—consistently.

- 1. ALL HEARTWOOD**—Heartwood is the most durable part of the tree. Only prime Douglas fir heartwood is used throughout the panel. Result... flawless, stronger, better looking panel.
- 2. SOLID INNER PLYS**—Even the smallest knotholes are removed and plugged in all veneers. Troublesome, hard-to-repair core gaps are eliminated. Screws and nails bite solid wood every time.
- 3. EDGE-JOINTED INNER PLYS**—Veneers for inner plys are machine-edged, meticulously butted square together. Every saw cut reveals solid wood.
- 4. REHUMIDIFIED**—Natural moisture lost in manufacture is carefully restored—an exclusive Harbor process. Eliminates main reason for dimensional change or warping.
- 5. TOUGH PLASTIC SURFACE**—Rugged surface hides wood grain, wears like glass, holds paint far better than wood, does away with checking.

Harborite

builds better homes, outside, inside

LAPPED SIDING, SOFFITS

Hard finish, smooth plastic surface gives any house a better-built look. Holds paint far better than wood.



GROOVED PANEL SIDING

Fits modern trend towards vertical-texture exteriors. Gives homes expensive look. Big 4x8 panels go up fast.

INTERIOR PANELING

Earthy color with contrasting grooves adds rich texture to dens, playrooms—wherever hard wear occurs.



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CORPORATION
ABERDEEN, WASHINGTON**

Warehouses and sales offices in Aberdeen, Atlanta, Tampa, Chicago, Cincinnati, Indianapolis, Jacksonville, Oakland, San Francisco, Los Angeles and Seattle



Residence in Chestnut Hill, Pa. Architect: Joseph B. Townsend, Jr., Philadelphia, Pa. Contractor: Haverstick-Borthwick Co., Philadelphia, Pa. Windows: 20 Lupton Aluminum Casements. Photos by Cortlandt V. D. Hubbard.

Lupton Windows Bridge a Gap

Near Philadelphia, two little stone gardener's houses, built in 1812, have a new look and a bright new future with a crisply modern new section connecting the two.

Unlike the windows in the old, stone wings, which had to be replaced, those in the new section will stay young. They're Lupton Aluminum Casements — built for a life-time of service with a minimum of maintenance. They will never need paint — will always work smoothly and efficiently without shrinking, warping, swelling or binding.

You'll find it profitable to build with Lupton Aluminum Windows. They are

easy to handle and install. They are built for lasting service with construction and design features proved by over 40 years experience in manufacturing metal windows. There's a style and size for every building project. Contact the nearest Lupton Representative, or write, wire or phone direct—you'll get prompt attention.

MICHAEL FLYNN MANUFACTURING COMPANY
700 East Godfrey Avenue, Philadelphia 24, Pa.
Member of the Steel Window Institute and Aluminum Window Manufacturers Association

LUPTON

METAL WINDOWS



Lupton Casement
Steel or Aluminum



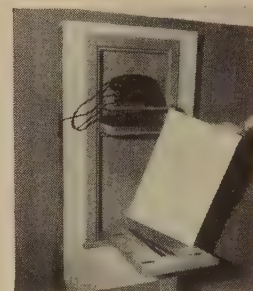
Lupton Aluminum
Double Hung Window



Lupton Aluminum
Awning Window

For further details, check numbered coupon, p. 234

back into the wall opening when not in use. Phone and directory space are sized to hold any model of instrument or the largest city directory. The white pine trimmed plywood assembly can be installed in less than 15 min., using only four nails. The cabinet is



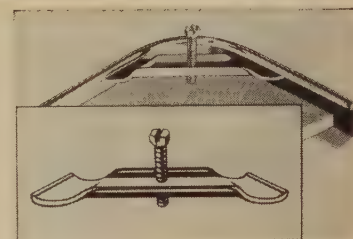
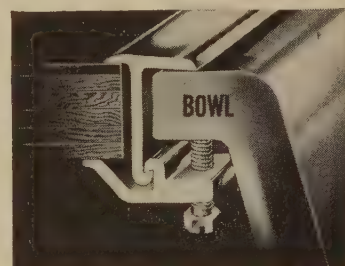
13½" wide and 3⅝" deep, with over-all dimensions of 16½" x 36½". Fully assembled before shipping, the *Telo-Seat* is trimmed and sanded, ready for finish.

Retail price: \$15.75

Manufacturer: SMS Mfg. Co.
115 Monroney Drive
Oklahoma City, Okla.

h. CORNER CLIPS anchor frames to flat-rim sinks before they are set in cabinet tops

Corner supports, nailed to the underside of cabinet tops to hold the sink in place while the frame is installed, are unnecessary in the



Sink-Lok frames. These use a new corner clip to fasten the frame to any flat-rim sink or lavatory before it is set into the sink-well opening. Thus, the frame itself acts as the sink support while the securing lugs are hooked onto the underside of the frame.

Ordinary (½"-¾") ledges in vitreous china sinks are accommodated in an addition to the *Sink-Lok* line, which covers installation needs of flat-rim china sinks with ledge thicknesses up to 1⅛", with either round or square corners.

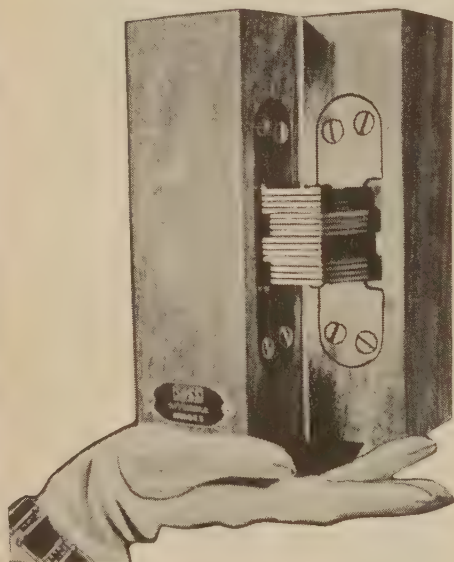
Price: \$8.20-\$17 (28 standard sizes)

Manufacturer: B & T Metals Co.
425 W. Town St.
Columbus 16, Ohio

continued on p. 202

**SOSS
HINGES**

ADD Beauty AND Distinction
TO EVERY HOME



Unique, invisible SOSS HINGES are completely hidden from view when doors or lids are closed. This feature eliminates ugly protruding hinge butts. SOSS HINGES make possible the flush, clean, smooth surfaces so necessary for smart, contemporary architecture. Use them whenever you build or remodel.

FREE BOOKLET



Gives complete details on America's only modern hinge. Write for it today—

SOSS
**INVISIBLE
HINGES**

the hinge that hides itself!

SOSS Manufacturing Company
Dept. 20-21777 HOOVER RD., DETROIT 13, MICH.



• Delivery Room of new Memorial Hospital, Salem, Oregon

• R. E. Green, Plastering Contractor on Memorial Hospital, presents Certified Craftsmanship Certificate covering project to Mr. Fred Kruse, representing Architect and Mr. Irwin F. Wedel, Hospital Administrator.



Certified Craftsmanship IN ACTION!

The Certified Craftsmanship Certificate is a written pledge of adherence to work schedules, job cooperation, work of craftsmanship caliber and nationally recognized standards of quality. A certificate is yours for the asking from lathing and plastering contractors adhering to the Code of Standard Practices for Lathing and Plastering.

We suggest a thorough reading of the Code of Standard Practices which appears on the back of every certificate. Ask your lathing and plastering contractor for a copy, or write National Bureau for Lathing and Plastering, 1401 K Street, N.W., Washington 5, D.C.

**Associated Manufacturers
of Lathing and Plastering Materials**
520 N. Michigan Avenue, Chicago 11, Illinois

FINISHING LIME ASSOCIATION OF OHIO • GYPSUM ASSOCIATION
METAL LATH MANUFACTURERS ASSOCIATION
PERLITE INSTITUTE • VERMICULITE INSTITUTE

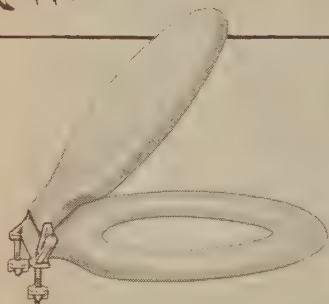


• This is the emblem of the National Bureau for Lathing and Plastering. It symbolizes high standards of job performance and responsibility.



It pays to give them

Quality
they recognize



Nowhere else can you impress quality on your customers so readily as in the bathroom.

Here quality — *known quality* — is instantly recognized, reflects value on the whole house. Builder after builder has told us that a Church Seat in the bathroom has brought favorable comment from almost every viewer... obviously accepted as an indication of quality in everything around it.

Nationally advertised for over 30 years, Church Seats are known for high quality, low-cost-per-year of satisfactory service. In a wide range of styles and colors — at better plumbing stores everywhere.

The name CHURCH on any product stamps it beyond question as the best

Church

SEATS

"The Best Seat in the House"[®]

C. F. CHURCH MFG. CO., HOLYOKE, MASS.

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Serving home and industry:

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& WALL TILE • DETROIT CONTROLS • KEWANEE BOILERS
ROSS EXCHANGERS • SUNBEAM AIR CONDITIONERS

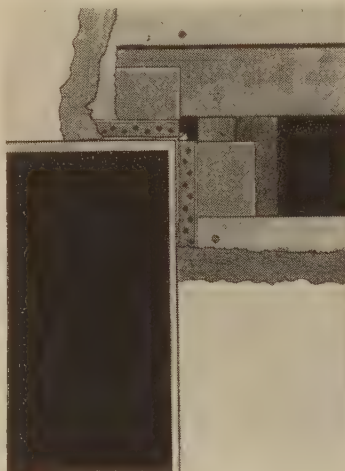
NEW PRODUCTS *continued from p. 198*

For further details, check numbered coupon, p. 234

i. METAL STRIPPING eliminates need for wood casing around windows and doors

Doors and windows can be installed flush with plastered walls, with no need for bulky wood trim. This is done by using the *Dor-Win Frame Seal*, a zinc-coated steel stripping that fastens frame to rough studding and provides both a channel for gypsum lath and a rigid ground for finish plaster.

Frame Seal is furnished in precut lengths, and is installed in the roughing-in stage.



Interlocking of butt and jamb plates is shown in installation photo.

When plasterers are through, painters can go right to work without waiting for carpenters to trim doors and windows. Plastering flush to the *Frame Seal* provides a perfectly straight edge, and all nails are concealed beneath the plaster. If desired, the stripping can be furnished already attached to standard length, precut wood frames, protected by heavy paper which is stripped away from the frame after plastering.

Price: 16¢ per lin. ft.

Manufacturer: Dor-Win Frame Seal Co.
710 W. Rockside Rd.
Cleveland 9, Ohio

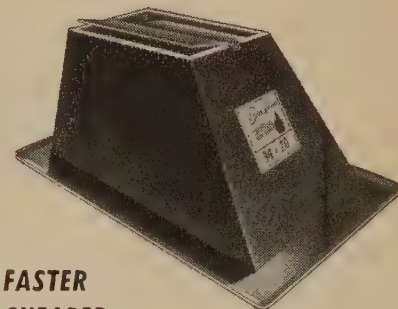
j. BUTT HINGE folds into itself, needs no mortising of door or jamb

Time-consuming mortising of door butts and jambs is not required with the *No-Mortise*



Fasting, which substitutes a clever interlocking of both plates for the usual gouging
continued on p. 206

NOW...you can build that **unusual** fireplace



**FASTER
CHEAPER**

BETTER...with the new



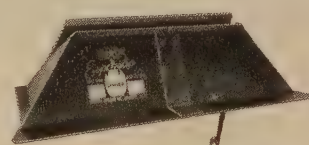
Here's the *easy* answer to the popular trend toward *unusual* fireplace openings. In fact, the Beneform Universal Damper is the *only* answer that assures *lower* construction costs as well as the strong smoke-free draft so vital in unconventional fireplace design.

Builds ALL 6 Basic Opening Types

No matter *which* fireplace type you are building... projecting corner, 2 sided or 3 sided openings, openings in 2 rooms, open all around, etc.—Beneform will build it *better* — and at *lower* cost. Thousands of successful installations and our years of fireplace specialization are your assurance of complete satisfaction...

Six Stock Sizes Available...

—ranging from 26" x 26" up to 50" x 24". Complete specifications, prices and recommended construction details for all types of fireplaces furnished upon request.



**EXPANSIP
STEEL
DAMPERS**

The famous boiler plate steel damper with the exclusive slip-joint feature, which takes up expansion that occurs when damper gets hot. 60° front slope gives sure draft. 8 sizes — up to 72" wide, designed for easy lay-up of brickwork.



**CAST
IRON
DAMPERS**

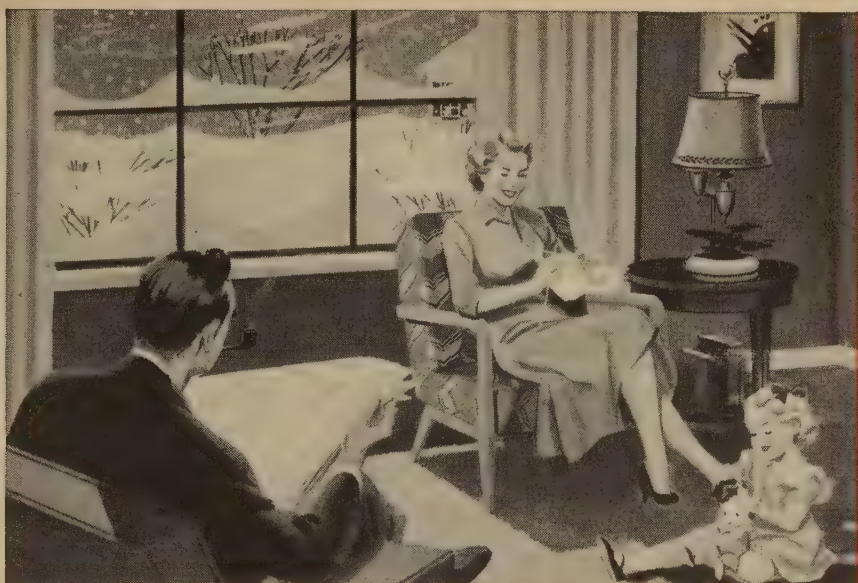
Improved, higher front design assures better draft, better smoke passage. Sturdy cast iron construction, with either cast iron or steel valve. Precision-cast in our modern foundry, Bennett cast iron dampers have no thin spots or weak sections to give trouble. Wide range of sizes.

See your Bennett Supplier for the complete Bennett line including Benefire Fireplace Forms, Ash Dumps, Cleanout Doors and the TRUE Flexscreen.

Write 255 Call Street, for free catalog

BENNETT-IRELAND INC.

Chartered in 1908
NORWICH, NEW YORK



FOR SOLID COMFORT
...WINTER AND
SUMMER

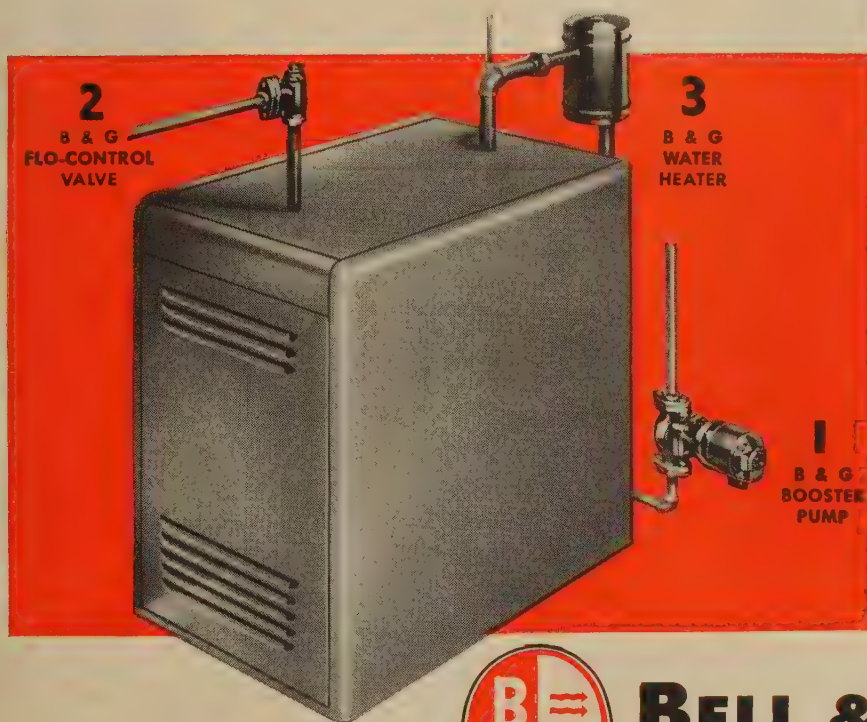
B & G Hydro-Flo[®] SYSTEM

ONLY **WATER** CAN GIVE A HOME **ALL** THESE COMFORT, CONVENIENCE AND ECONOMY FEATURES

Think of the *sales punch* you can build into your homes with a B & G Hydro-Flo System! No other type of system can offer so many advantages which contribute to utterly comfortable living.

With a B & G Hydro-Flo System you've built-in sunny *radiant* heating—uniform temperature—draftless rooms and the convenience of an all year 'round supply of domestic hot water. Snow melting and summer cooling equipment can be included when the heating system is installed or at any time later.

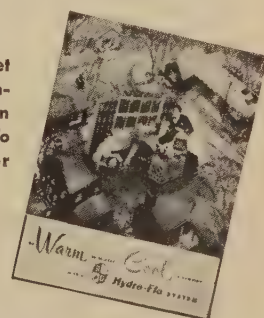
You can assure your prospects of low fuel bills, because the B & G Hydro-Flo System smoothly and closely adjusts fuel consumption to weather conditions. Get the facts now on how to make your homes alive with features which attract buyers and close sales!



HOW THE B & G HYDRO-FLO SYSTEM OPERATES

1. The thermostatically controlled Booster Pump circulates hot or cold water through the system, depending upon the season. 2. The Flo-Control Valve helps maintain a uniform home temperature and permits summer operation of the boiler for domestic water heating. 3. The Indirect Water Heater produces an ever-ready supply of domestic hot water, winter *and* summer.

This 4-color booklet will give you complete information on the B & G Hydro-Flo System—send for your free copy.



BELL & GOSSETT

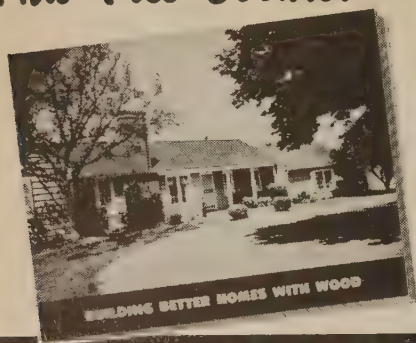
C O M P A N Y

Dept. DT-10, Morton Grove, Illinois

Canadian Licensee: S. A. Armstrong, Ltd., 1400 O'Connor Drive, Toronto, Canada

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BUILDING BETTER HOMES WITH WOOD

shows why more than 150,000 dwelling units have been built, faster, better, and more economically, with Teco Trussed Rafters that provide

- 1 Complete flexibility of design** — No interior bearing walls to retard open planning.
- 2 Faster building schedules** — Units can be closed in and finished more quickly.
- 3 Savings in time, material, and labor** — Easily fabricated, assembled and erected with less manpower.
- 4 More rigid joints, when using genuine Teco Wedge-Fit timber connectors in conforming grooves cut with the special Teco grooving tool.**



TIE YOUR TRUSSES
DOWN WITH

Trip-L-Grip

FRAMING ANCHORS

TIMBER ENGINEERING COMPANY

1319 - 18th Street, N. W., Washington 6, D. C.

Please send free copy of the booklet, "Building Better Homes With Wood" and Trip-L-Grip information.

NAME.....

FIRM.....

STREET.....

CITY.....ZONE.....STATE.....

NEW PRODUCTS continued from p. 202

For further details, check numbered coupon, p. 234

of clearance from the wood. Hammer and chisel are not needed; the only tool required is a screw driver. Hinges are made in a wide selection of sizes and finishes.

A patented offset assures automatic self alignment, and the thickness of the metal



Cross-section of door-wall joint details how gypsum lath is fitted into Frame Seal channel before finish plastering.

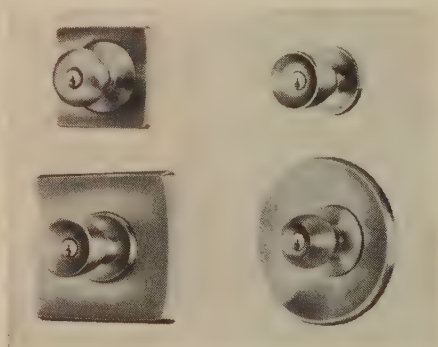
provides the gap at the joint. The five-knuckle protrusion permits a full 180° swing of the door.

Price: 3½", brass finish: 78¢ per pair

Manufacturer: No-Mortise Hinge Corp.
Bound Brook, N. J.

k. LOCKS AND ESCUTCHEONS go sleekly contemporary in both square and round designs

Contemporary house design demands hardware that is in accord with it, and Schlage's newest versions of their locks and escutcheons offer the builder and architect a variety of



possible entrance and interior door effects with a three-dimensional look.

Saturn (6") for entry doors, and *Tulip* are raised circles, and *Imperial* (5½" sq.) and *Regent* (3¾" sq.) are concave-faced square versions. Schlage's long backset principle enables these locks to be positioned anywhere into the center of the door.

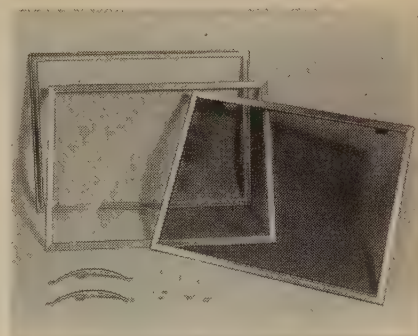
Price: Tulip locks, \$5.60-\$13; Regent escutcheons, \$2.20; Imperial, \$4; Saturn, \$6

Manufacturer: Schlage Lock Co.
2201 Bayshore Blvd.
San Francisco, Calif.

continued on p. 212

NEW PRODUCTS

Advertisement

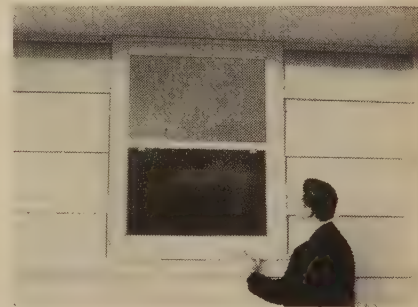


COMBINATION WINDOW KIT turns prime window into complete unit.

A new window idea introduced by DeVAC combines any prime window and the DeVAC self storing combination windows into a single unit. Photo shows complete DeVAC Bilt-In kit, sold by the DeVAC factory only to millwork distributors and manufacturers.

Builders laud the advantages of drastically reduced installation cost and ready acceptance by the homeowner. Installation eliminates the cost of separate storms and screens, plus the fitting of hardware and painting of all storm and screen sash. The Bilt-In kit is installed by the millwork manufacturer or distributor where the prime window is produced or assembled.

The Bilt-In operates in a patented wood surround which is attached to become part of the window frame. This wood surround unit is produced by the millwork manufacturer or distributor.



Advantages to the homeowner give the unit an impressive list of sales features. Cost of obtaining a complete self-storing unit is substantially reduced. Clean exterior appearance with a minimum of exposed metal fits any type of architecture. Normal window maintenance is reduced tremendously and both storm sash and screen lift out from inside the home for easy cleaning. The anodized aluminum will not tarnish nor even show fingermarks and is impervious to customary lime corrosion when plaster is left on metal during construction. Aluminum is extra heavy duty 63ST6 extrusion. Screen is lifetime Fiberglass.

Dealers and contractors may obtain the DeVAC Bilt-In as a part of their prime window through the following distributors:

Bradwell-Robinson, Fargo, N.D.
Carr-Cullen, Minneapolis
Curtis Companies, Inc., Minneapolis
A. A. Kindem & Sons, Minneapolis
Knecht Lumberman Supply, Rapid City, S.D.
Lake Street Sash & Door, Minneapolis
Snell Sash & Door, Omaha, Neb.
Snell Sash & Door, St. Paul, Minn.

Key sales areas are still available and distributors are encouraged to make inquiry for franchise openings in their particular region.

Write today for complete information, price list, literature and catalogue sheet on the DeVAC Bilt-In.

DeVAC Window Company
5901 Wayzata Blvd. Dept. H.
Minneapolis, Minnesota



Attractive modern residence in Manitowoc, Wisconsin, roofed with "Century" No. 30 Spanish Red Shingles, owned by Mr. Vincent Kerscher, of Frank J. Kerscher Company.

Here's another beautiful Roof of "CENTURY" Asbestos-Cement Shingles

Note the deep
cypress wood texture
in these No. 30 Asbestos-Cement
Roofing Shingles.

"Century" Roofing Shingles have the colors and textures that make a home especially attractive. They also have all the qualities that make for an enduring roof, being made of asbestos fiber and portland cement... two practically indestructible materials.

These shingles will not burn. They successfully withstand the effects of rain, snow, wind and sun. They will not rot. They become harder with age.

Still, with all these outstanding advantages, "Century" shingles are surprisingly low in cost. The owner of a new home—or a remodeled home—will know they're a sound purchase.

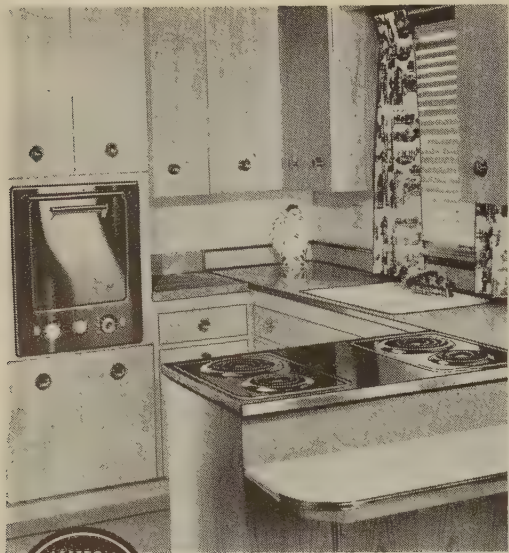
Be sure to keep "Century" shingles in mind for your next project. They're described in both Sweet's Architectural File and Sweet's Light Construction File. Or write to us for detailed information.

KEASBEY & MATTISON COMPANY • AMBLER • PENNSYLVANIA

America's first maker of asbestos-cement shingles



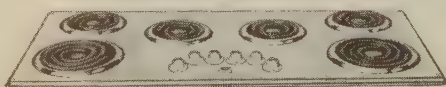
THE KITCHEN *Sells* YOUR HOUSE



**Custom-Bilt*
Electric Ranges**

Sell Your Kitchens

WIDE SELECTION OF COOKING TOPS



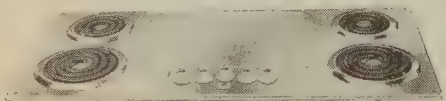
six surface units



three units
Convertible Duo-Cook

remote control
switches

compact
four units



four units with middle griddle

5 cooking tops for most convenient kitchen design
Stainless Steel Beauty • Quick, easy installation
Convertible Duo-Cook or middle griddle
Remote control switches • Seven heat switches



waist-high
oven



separate griddle



versatile
warming drawer

EASY, QUICK INSTALLATION

Waist-high, fully automatic ovens, with timed appliance outlet and controls, fit into standard cabinets. Build or remodel with separate griddle or low-cost warming drawer.

*Trademark Reg. U.S. Pat. Office

3-977

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Subsidiary of Norris-Thermador Corp.
601 W. Cleveland Ave., Milwaukee 15, Wisconsin
Please send me free illustrated literature
on L & H Custom-Bilt Units:

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Address _____
City _____ Zone _____ State _____

NEW PRODUCTS *continued from p. 206*

For further details, check numbered coupon, p. 234



l. LIGHT-REFLECTING PAINT, applied to roofing, cuts indoor temperatures as much as 30°

As much as half the load on the air-conditioning system may come from sun heat absorbed through the roof, but a smooth white roof can reflect up to 70% of the sun's rays. A new paint, *Plasticool*, has been designed for application over shingle, metal, and built-up roofs, and the manufacturer claims that temperatures in the areas beneath the roof can be held to within a degree or two of the outside air temperatures, instead of rising as much as 30° in the enclosed area.

Plasticool is a flexible resin with finely ground pigments entrained, thinned with water and either brush or spray applied. Coverage on a composition shingle roof is not more than 100 sq. ft. per gal., but this figure doubles when the paint is sprayed on a smooth metal surface. Asphalt, tar and pitch surfaces must be primed before painting.

Price: \$9.50 per gal.

Manufacturer: Coating Laboratories, Inc.
319 S. Quincy
Tulsa, Okla.



m. SHINGLES for low-pitched roofs have factory-applied adhesive strip

A 3/4" ribbon of petroleum resin adhesive serves as a joining force on Johns-Manville's shingle for use on roofs down to 2' in 12' pitch. Though brittle at ordinary temperatures, the adhesive softens under the heat of the sun, and each shingle adheres to the one beneath it.

Price: Approximately 12% premium over 3-tab, thick butt shingles

Manufacturer: Johns-Manville Corp.
22 E. 40th St.
New York 16, N. Y.

continued on p. 218

SELL MORE HOMES!

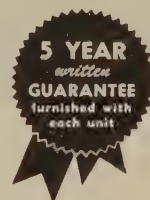
Assure your prospects of adequate storage space. Precision and Simplex Folding Stairways can help your homes move fast for more profits!

PRECISION QUALITY

Plus Sales Features

AMERICA'S NO. 1 STAIRWAY

Stocked by 130 leading jobbers in the U.S.A. and Canada.



SEVEN EXCLUSIVE FEATURES

- 1—HYDRAULIC SAFETY CHECKS
 - 2—ACTUATED BY COUNTERWEIGHTS
 - 3—LIFE-TIME ROLLER BEARINGS
 - 4—RUGGED AND STRONG
 - 5—INSULATED DOOR PANEL
 - 6—FULL WIDTH SAFETY TREADS
 - 7—FITS ANY CEILING HEIGHT
- TWO STANDARD SIZES: 8'9" & 9'9"

SIMPLEX QUALITY

Plus Low Cost

NO. 1 PROFIT-MAKER

New! BALANCED SPRING ACTION for effortless operation.

- SIMPLE AND EASY TO OPERATE
- RUGGED AND STRONG
- TWO STANDARD SIZES—8'3" & 9'9"
- NO. 1 KILN DRIED LUMBER—HEAVY GALVANIZED STEEL—ALL PARTS SECURED BY BOLTS AND SCREWS—NO NAILS
- SHIPPED IN ONE PACKAGE MANUFACTURED IN PRECISION'S MODERN PLANT.



MANUFACTURED BY

PRECISION PARTS CORP.

400-HH North First Street • Nashville 7, Tennessee



No building paper needed. Because Temlok is completely waterproofed, shingles, clapboard, brick, or stone can be applied directly to it without building paper. Once the house is finished, Temlok prevents dampness from seeping in through the walls, yet allows vapor to pass out through the walls. This prevents condensation from collecting inside and causing damage to the structural members.



No costly delays from rain. Rainstorms will never knock a big hole in your construction schedule when you use Temlok. The new Rain-Shield* coating, plus asphalt impregnation, completely seals every square inch of Temlok against water. When storms are over, work can be resumed almost immediately. Temlok is clean to handle . . . leaves no gummy coating on carpenters' hands and saws.

* Trade-Mark

with TEMLOK



No additional insulation is needed. No matter whether you're building in a warm or a cold climate, Temlok Roof Deck provides adequate ceiling insulation. You're spared the expense and trouble of installing insulation separately. For use in areas where the average January temperature is 40° F. or lower, Temlok Roof Deck is available with a special vapor barrier for protection against moisture.



No further ceiling finish needed. The under-surface of Temlok Roof Deck is pre-painted with two coats of light ivory paint to make an attractive ceiling over exposed beams. This means when you install Temlok Roof Deck, your ceiling is automatically finished at the same time. Long edges of the board are beveled to provide a neat joint line. Four tongue-and-groove edges assure a tight fit.

For full details on how to cut your costs with Armstrong Temlok building materials, see your Armstrong lumber dealer or write Armstrong Cork Company, 3702 Sixth Street, Lancaster, Pennsylvania.

Armstrong TEMLOK . . . house . . . after house
SHEATHING • ROOF DECK • INTERIOR FINISH

HERE'S A

Top DRAWER Secret

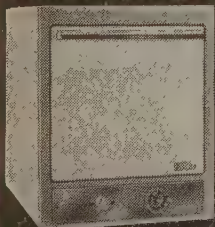


Model
No. 4-5C

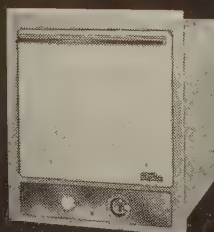
THAT CAN PUT MONEY IN YOUR POCKET

HERE's the *only* cooking top on the market that leaves the top drawer in the cabinet free for storage use. Requires only 3" depth, easily installed — no disassembling of switches, fits standard 24" and 30" base cabinets, 7 heat switches and indicator light. This unit *cuts installation costs — increases appraisal value.*

Write Today for price list, descriptive literature and details about our special builder's program. Address Dept. H



Stack-on and Insert
Ovens to fit all standard
Kitchen Cabinets

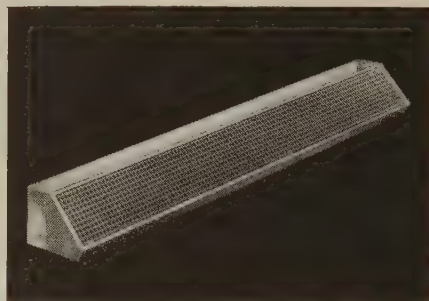


THE *Stiglitz* INFRA-AIRE Built-in ELECTRIC RANGE

STIGLITZ CORP., 2007 Portland Ave., Louisville, Ky.

NEW PRODUCTS *continued from p. 212*

For further details, check numbered coupon, p. 234



n. COVE AND BRACKET FIXTURE gives direct or indirect light when mounting is reversed

From the same lighting fixture, either indirect cove lighting or a shielded down-light can be obtained by a simple reversal of the mounting. With the mounting angle upward, the *Gratelite* beams 80% of its light upward and outward, with 20% directed along the side walls. Used as a down light, this distribution is reversed. In either position, perfect shielding is provided in the 45°-90° zones, giving maximum eye protection.

Beams from the fluorescent lamps are diffused through the plastic grating to give a luminous appearance to the fixture itself, and the movement of air through the $\frac{3}{8}$ " openings keeps the lamps cool.

Gratelites are either 24" (two 20 w. tubes) or 48" (two 40 w. tubes) lengths, and extend either 7" or 5 $\frac{3}{4}$ " from the wall.

Price: 24", \$18; 48", \$24

Manufacturer: Edwin F. Guth Co.
2615 Washington Blvd.
St. Louis 3, Mo.



o. HOUSE NUMBERS are visible from any direction, need only 10 w. bulb

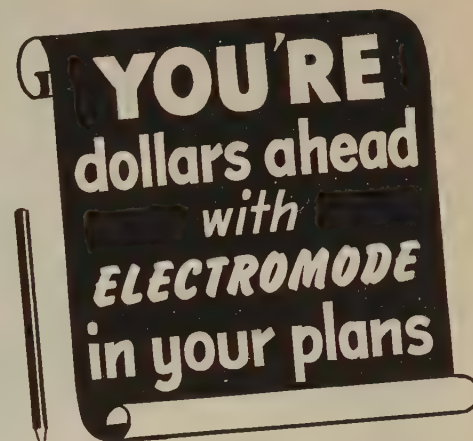
An indirect, house-number light, the *Reflecto-Lite*, furnishes porch or entrance illumination as well as house identification. It requires only a 10 w. bulb for light equivalent to that of an unreflected 100 w. lamp.

Numerals are red or blue, in a stainless-steel outer shell, silhouetted against a white enamel background. The manufacturer claims that visibility is as much as 100 yards in any direction. Dimensions: 11" long, 8" wide, 5 $\frac{1}{2}$ " high.

Price: \$10.60

Manufacturer: Vulcan Machine Mfg. Co.
1001 W. Centre St.
Mahanoy City, Pa.

Technical Publications, p. 226

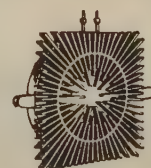


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You put your homes on the Top Preference List when you include Electromode Automatic Electric Heaters in your plans. No basement, vents or ductwork needed. Saves you time and money.

Buyers are quick to decide on homes with Electromode Heaters, because Electromodes have the features they want:

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Approved by Underwriters' Laboratories

HEAT for BIG ROOMS

This Electromode wall model distributes heat by down-flo principle, assuring warm floors. Handsome silver grey hammer-tone finish blends with other furnishings.

Model WA

Capacities: 1500 to 4000
watts



For Modern BATHROOMS



Enhance the beauty of the bathroom or any small room with this wall model Electromode. Choice of gleaming chrome or white enamel finish to blend with other fixtures.

Model WJA

Capacity: 1320 watts

ELECTROMODE CORPORATION

Dept. HH-25, 45 Crouch Street
Rochester 3, N. Y.

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write, wire, or call Hotpoint, Builder Department

5600 W. Taylor Street, Chicago 44, Ill.

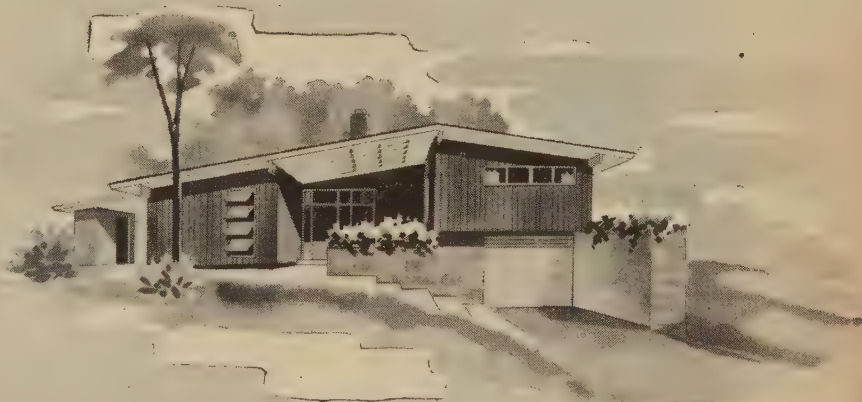
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Architect—Bruce McCarty, A.I.A., Knoxville, Tenn.



The Eastern House

Architect—Stanley C. Reese, New York

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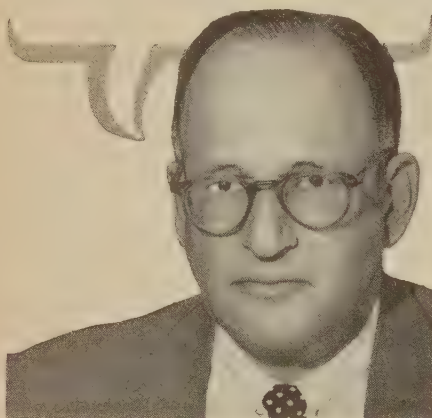
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See for yourself — write for color card today.

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230 Oliver Bldg., Boston 9, Mass.

TECHNICAL PUBLICATIONS

- 123. DOCUMENTARY FILMS.** "Pipe Dream Come True." Orangeburg Mfg. Co., Inc., Dept. HH, 488 Madison Ave., New York 22, N. Y. 18 min.

Available for showing at meetings of free trade associations, the film traces man's fight for better sanitation and control of water, with some emphasis on the role played by the sponsor's product in sewer and septic tank systems, basement flood prevention and various farm drainages.

- 124. BUILDING PRODUCTS.** Majestic Building Products. The Majestic Co., Inc., Dept. HH, Huntington, Ind. 12 pp. 8 1/2" x 11"

Photographs and specifications of dozens of steel and iron products for builders. Incinerators, outdoor fireplaces, ash dumps and dampers are among the items pictured.

- 125. AIR CONDITIONING.** Electro-Air Electronic Air Cleaners. Electro-Air Cleaner Co., Dept. HH, 1285 Reedsdale St., Pittsburgh 33, Pa. 8 pp. 8 1/2" x 11"

Causes, effects and solution of the nationwide problem of polluted air, with emphasis on Electro-Air's units for homes or commercial buildings. Full specifications and dimensions as well as installation possibilities are detailed in this booklet.

- 126. HEATING.** Char-Gale Aluminum Fittings, Char-Gale Galvanized Fittings, Gutters, Pipe and Accessories, and Char-Gale Gale-Air 4 1/2" System. Char-Gale Mfg. Co., Dept. HH, Anoka, Minn. 42, 42, 10, and 16 pp. respectively, all 8 1/2" x 11"

General catalogues of all the prefabricated fittings made for heating systems. Illustrations, specifications, shipping weights and prices of thousands of items.

- 127. AIR CONDITIONING.** Chrysler Airtemp Selection Guides. Chrysler Airtemp, Dept. HH, 1600 Webster Ave., Dayton 1, Ohio. 6 p. folded cards. 3 1/2" x 6 1/2"

The four Selector Guides are tailored to help determine the room air conditioner that would be best for a given house in any of the four major climate regions. Different tables provide for the cold, temperate, hot-dry and hot-humid areas, and quickly indicate what cooling can be expected from different sized equipment.

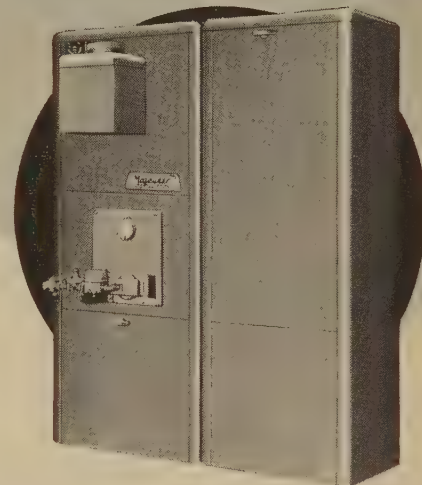
- 128. KITCHENS.** Let's Plan Your New Kitchen. Brammer Mfg. Co., Dept. HH, 1441 Rockingham Rd., Davenport, Iowa. 16 pp. 8 1/2" x 11"

Planning and color advice for different shaped kitchens, with basic data about wiring, ventilation, dining area, etc. A full line of base and wall cabinets is shown in natural birch color.

continued on p. 230

Majestic

Air Conditioners



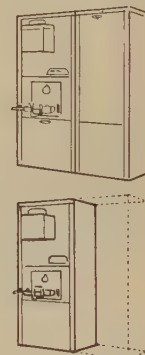
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Year-around air conditioning helps sell homes faster! With Majestic's compact *twin units*, as small as 22" square at the base, you can offer this modern feature in even the smallest homes. Or, at a low initial cost, you can offer homes designed for "heating now, cooling later" with a minimum expense for extra ductwork. Twin units are available in both upflow and counterflow models. Get full details from your dealer on Majestic's complete line of gas or oil furnaces—from 76,000 to 400,000 BTU capacity—and matching refrigeration units. AGA approved and UL listed equipment!

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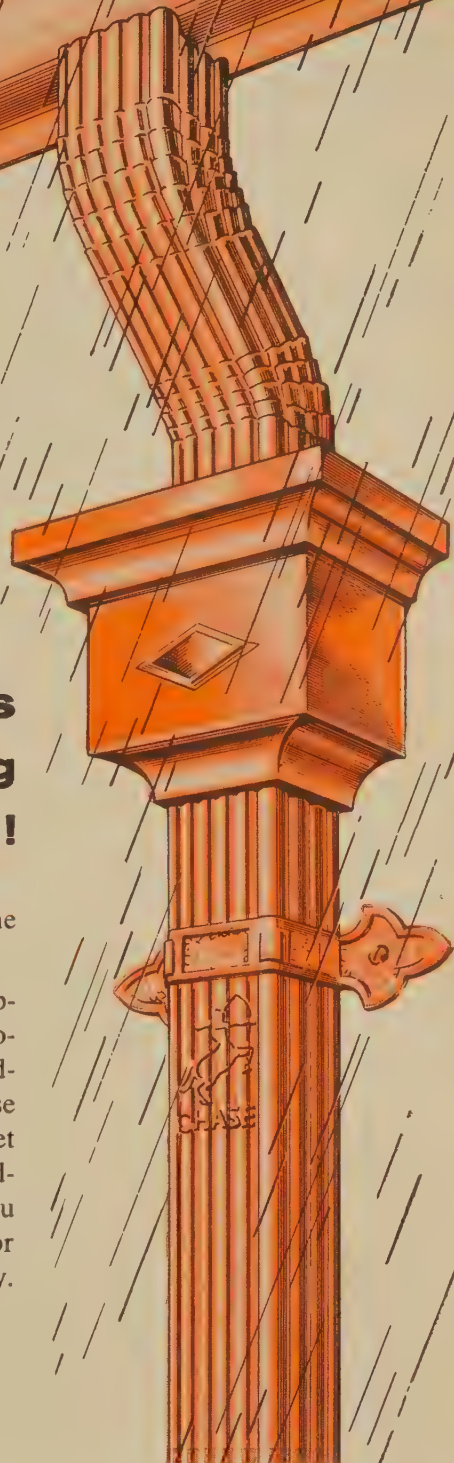
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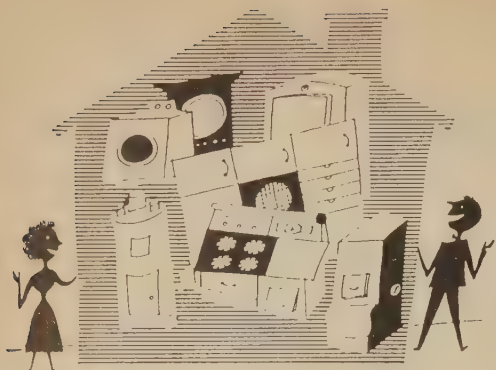
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TECHNICAL PUBLICATIONS

Continued from p. 226

129. DOCUMENTARY FILMS. Westinghouse Sound Films. Motion Picture Dept., HH, Westinghouse Electric Corp., 3 Gateway Center, Pittsburgh 30, Pa. 52 pp. 6" x 9"

Complete listing of films, both general interest and product, available free to organized groups. Each film is reviewed briefly, with projection time, available size, and shipping weight.

130. LUMBER. Malarkey Redwood Lumber. Eureka Redwood Lumber Co., Dept. HH, P.O. Box 1002, Eureka, Calif. 12 pp. 8½" x 11". 25¢ ea.

Full color illustrations of the six basic grades of redwood lumber, with nine examples in each grade displaying all the characteristics within limitations of the grades. Specifications and uses for each grade are given, and the colorful lumber looks almost edible.

131. WINDOWS. Aluminum Window Specifications. Aluminum Window Manufacturers' Assn., Dept. HH, 74 Trinity Pl., New York 6, N. Y. 24 pp. 8½" x 11"

Quality of materials, construction, strength, and minimum air infiltration requirements for aluminum windows to obtain the Association's seal of approval, available to any window that meets the established standards.

132. PLASTICS. Translucent Fiberglass Panels. Alsynite Co. of America, Dept. HH, 4654 DeSoto St., San Diego 9, Calif. 4 pp. 8½" x 11"

Full color spectrum of this versatile building material, with installation photos and specifications, as well as physical data. A technical portfolio, AIA File No. 26-A-9, with independent technical reports, installation diagrams and all literature is available for 50¢.

133. PLYWOOD. The Story of APMI Plywood. Associated Plywood Mills, Inc., Dept. HH, P. O. Box 672, Eugene, Ore. 20 pp. 8½" x 11"

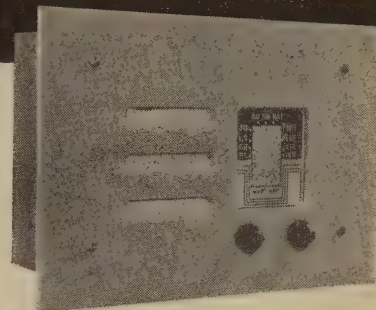
Picture and caption step-by-step story of plywood manufacture, from woods to shipping dock, for distribution to builders, architects and retail lumber dealers.

134. WIRING. Remote Control Wiring System. General Electric Co., Dept. HH, Construction Materials Div., Bridgeport 2, Conn. 32 pp. 8½" x 11"

Wiring diagrams, layouts, suggested specifications, technical and installation data for architects, electrical contractors and engineers or builders interested in the low-voltage method of wiring. Drawings and descriptions of all new components added to the GE line.

continued on p. 234

BUILT-IN RADIOS



... Only 3⅞" Deep!

- Fits in standard 4" partition
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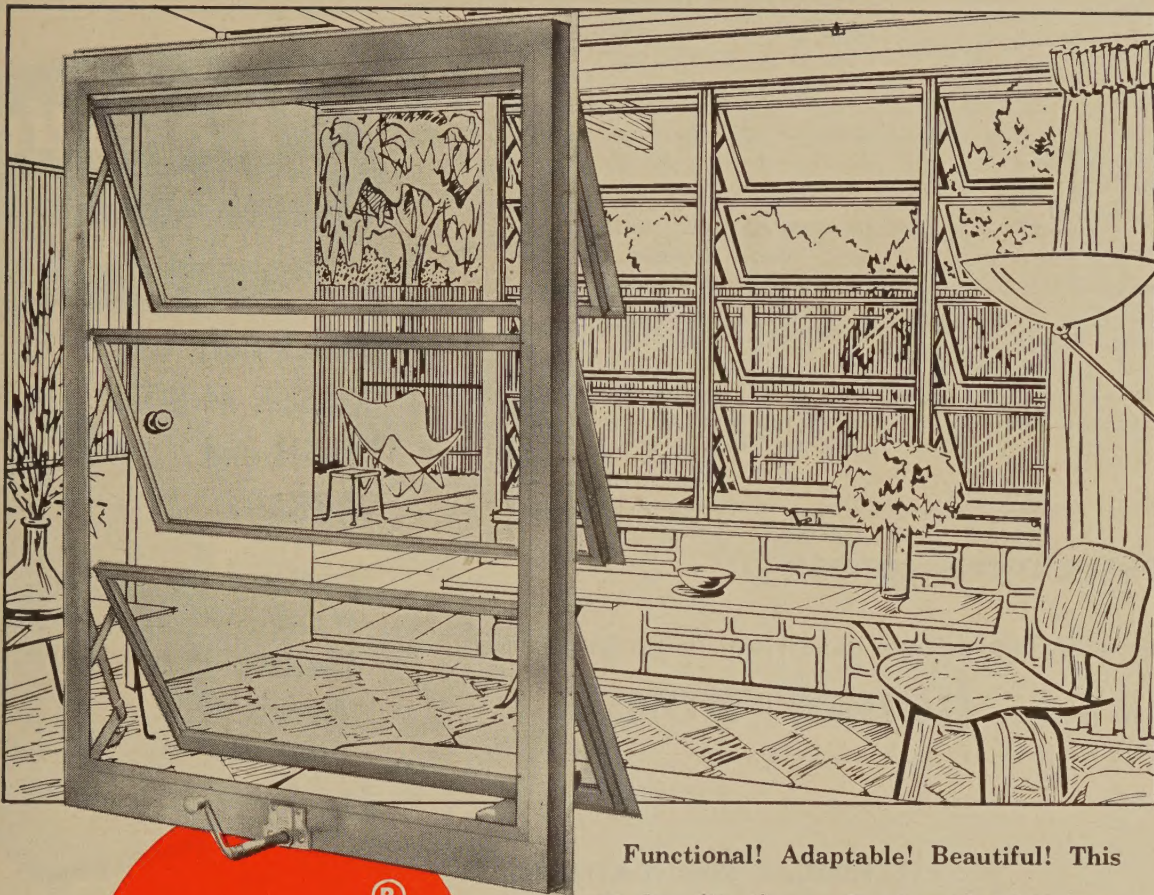
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bottom vent, only, opens for night ventilation! ★ Easily cleaned from the inside!

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AWNING



AWNING
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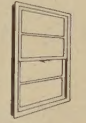
CASEMENT



HOPPER



JALOUSIE



DOUBLE
HUNG



RANCH
WALL



SELECT-
A-VENT



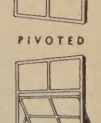
TWINSUL



BASEMENT



HORIZONTAL
SLIDING



PIVOTED



PROJECTED



UTILITY

135. HARDWARE. Baldwin Builder's Hardware. Catalogue No. 6. Baldwin Mfg. Co., Dept. HH, 1290 Central Ave., Hillside, N. J. 26 pp. 8½" x 11"

Illustrations and specifications of this complete line of hardware.

136. MILLWORK. Bendix Moldings. Bendix Mfg. Co., Dept. HH, 192 Lexington Ave., New York 16, N. Y. 26 pp. 8½" x 11"

Carved wooden moldings for a variety of uses.

137. HEATING. Thermo-Base Warm Air Baseboards. Gerwin Industries, Inc., Dept. HH, 214 Spring St., Michigan City, Ind. 8 pp. 8½" x 11"

A formula for figuring heating and cooling installation needs is part of this well laid out catalogue which promises to "make a heating and cooling expert out of any heating contractor." Photographs and diagrams illustrate how these units disperse warm air over wide areas of wall.

138. HARDWARE. Sliding Door Hardware. Lawrence Bros., Inc., Dept. HH, Sterling, Ill. 16 pp. 8½" x 11"

Packaged hardware for any door, closet or cabinet, that must slide sideways.

139. PLUMBING FIXTURES. Builder and Real Estate Salesman's Manual. Briggs Mfg. Co., Dept. HH, 300 Buhl Building, Detroit 26, Mich. 12 pp. 3½" x 5½"

A short sales brochure, explaining how to make the bathroom a sales feature when showing a house to possible buyers.

140. LIGHTING FIXTURES. Circline Lighting Fixtures. Carter Lighting Co., Dept. HH, Chelsea 50, Mass. 4 pp. 8½" x 11"

Photographs, dimensions and specifications.

141. HARDWARE. Extruded Aluminum Louvers. Construction Specialties, Inc., Dept. HH, 261 Jelliff Ave., Newark 8, N.J.

PRODUCTS AND PUBLICATIONS COUPON

For more information on new products and publications in this issue check

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- n. Grateite cove fixture.....☐
- o. Reflecto-Lite house numbers.....☐

TECHNICAL PUBLICATIONS

- 123. Film, "Pipe Dream Come True".....☐
- 124. Majestic building products.....☐
- 125. Electronic air cleaners.....☐
- 126. Char-Gale heating products.....☐
- 127. Chrysler Airtempt air conditioning.....☐
- 128. Brammer kitchens.....☐
- 129. Films. Westinghouse documentaries.....☐
- 130. Malarkey redwood.....☐
- 131. Aluminum window specifications.....☐
- 132. Alsynite plastic panels.....☐
- 133. APMI plywood.....☐
- 134. GE remote control wiring.....☐
- 135. Baldwin builders' hardware.....☐
- 136. Bendix moldings.....☐
- 137. Thermo-Base baseboards.....☐
- 138. Lawrence hardware.....☐
- 139. Briggs sales manual.....☐
- 140. Circline lighting fixtures.....☐
- 141. C/S aluminum louvers.....☐

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If addressing your inquiry directly to the manufacturer, please mention **house+home** and the issue in which you saw the product or publication.

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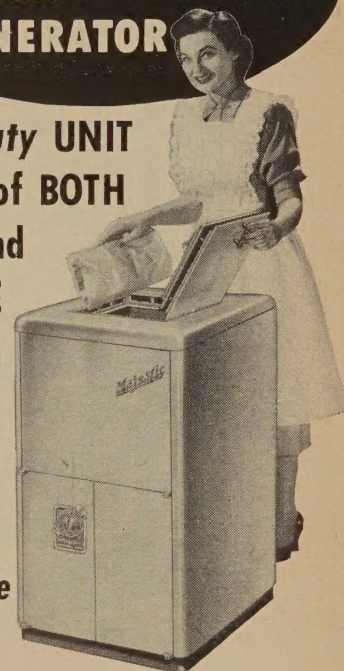
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TRASH and
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and
Fuelless
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Model 10-G illustrated: the automatic gas-fired unit with drying pilot and direct-fire burner. **Dimensions:** 20" wide, 24" deep, 36¼" high. **Capacity:** two bushels. **Flue:** requires 7" smoke pipe outlet and may be used with any chimney flue 6" or larger. **Burner:** monoport, 18,000 BTU rating, incinerates. **Pilot:** automatic, 1500 BTU rating, dehydrates. **Finish:** gleaming white enamel over rust-resisting Poly-Kote base.

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Sales Office: Athens, Ohio

Supreme Quality Since 1901
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How to forecast operating cost of a residential air-conditioning system

*By R. F. Crossman & I. B. Faigen**

Two Carrier engineers have come up with a new chart that makes it easy as pie to predict operating costs for home air conditioning accurately. The chart—a little bigger than this page—tells how much electricity *and* water are needed for cooling houses during an average summer in 50 major US cities.

To predict costs all you have to know are your local rates for power and water, plus the total heat gain of a house. For accuracy the heat gain must be based on the average 24-hour calculating method (which credits the structure for its thermal storage capacity).

* Senior application engineer; and manager, Application Engineering, Carrier Corp., Syracuse, N. Y.



Predicted annual cost to cool house with 2-ton heat gain is given for random cities. Costs are for air-cooled unit, vary because of weather and different power rates; e.g., hot Memphis has low annual cost due to cheap electricity.

How it works. Take a house in, say, St. Louis with a 2-ton heat gain and assume you use an air-cooled unit. For St. Louis the chart shows that an air-cooled unit will use 1,905 kwh of power a summer, per ton of heat gain. With a 2-ton house total power used will thus be 2 times 1,905 or 3,810 wkh. Since local power costs 1.9¢ per kwh, total operating cost comes to \$72.40 a summer.

The chart also tells how much water will be used each summer in thousands of gallons for units that use city water or a cooling tower. Water costs will of course be sharply reduced with a tower, and the chart indicates the savings that are possible with this method.

Key factor. The chart is actually a much-refined version of the Carrier prediction method announced last year (H&H, Apr. '54). Like that original method, prediction accuracy stems from the fact that operating costs are proportionate to the number of cooling days per summer *above* 70°, the same way heating is related to degree days *below* 65° in winter. Thus the chart is the end result of correlating summer weather data from each city with known facts on cooling operation.

No prediction method, however, can be fully guaranteed to hit costs on the nose for every house. The amount of cooling used is often influenced by such conditions as the number of kids in a family and the number of parties per week. Nevertheless, past experience shows that operating costs do fit a pattern and most families will have actual bills close to the predicted figure.

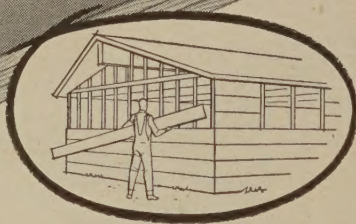
Weather factor. Predicted costs are for an average summer, based on Weather Bureau "norms." It is impossible to know beforehand whether a summer will be hotter or cooler than the norm but over a period of years actual cooling costs will level out fairly close to predicted figures.

The chart is being offered to the entire air-conditioning industry and builders and architects can get copies from Carrier dealers.

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